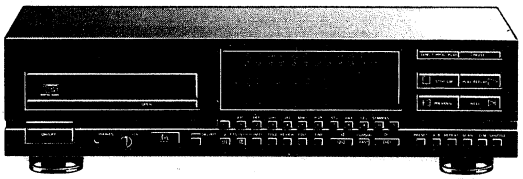
Compact disc player CD850II

20B/21B/25B/33B

Service
Service
Service



ServiceManual

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PHILIPS

PHILIPS

TECHNICAL SPECIFICATIONS

General

1.	Mains voltage /20B	:220V (±10%)
	/25B	:240V (±10%)
	/21B /33B	:110V-127V-220V-240V (±10%) Selectable by voltage adapter
2.	Mains frequency	: 50Hz
3.	Mains voltage selection	: See Circuit Diagram Power Supply
4.	Power consumption mains,operated	: 16W

Line output (Fixed and Variable)

1.	Number of channels	: 2
2.	Output voltage	: 2 Vrms ±1,5dB
3.	Unbalance left right	: max. ±0,6dB
4.	Output resistance	: 200 Ohm
5.	Amplitude linearity	: max. ±0,2db from 20 Hz to 20 kHz
6.	Phase non-linearity	: max. from 20 Hz to 20 kHz
7.	Signal to noise ratio	: min. 95dB from 20 Hz to 20 kHz
8.	Dynamic range (-60dB)	: min. 92dB from 20 Hz to 20 kHz
9.	Total harmonic distortion + noise	: min. 88dB from 20 Hz to 20 kHz
10.	Intermodulation distortion	: min. 88db from 20 Hz to 20 kHz
11.	Output attenuation	: min. 60dB
12.	Channel separation	: min. 100dB from 20 Hz to 20 kHz
13.	Automatic switched de-emphasis with time constant	: 15/50 µs
14.	Non-linearity on -90dB	: ±2dB

Variable headphone

1.	Output voltage	: max. 7,5 Vrms ±2dB
2.	Unbalance left-right	: max. ±0,6dB
3.	Output resistance	: 150 Ohm
4.	Load impedance range	: 32 Ohm to 600 Ohm load
5.	Output power	: max. 50 mW into 32 Ohm load max. 90 mW into 150 Ohm load max. 50 mW into 600 Ohm load

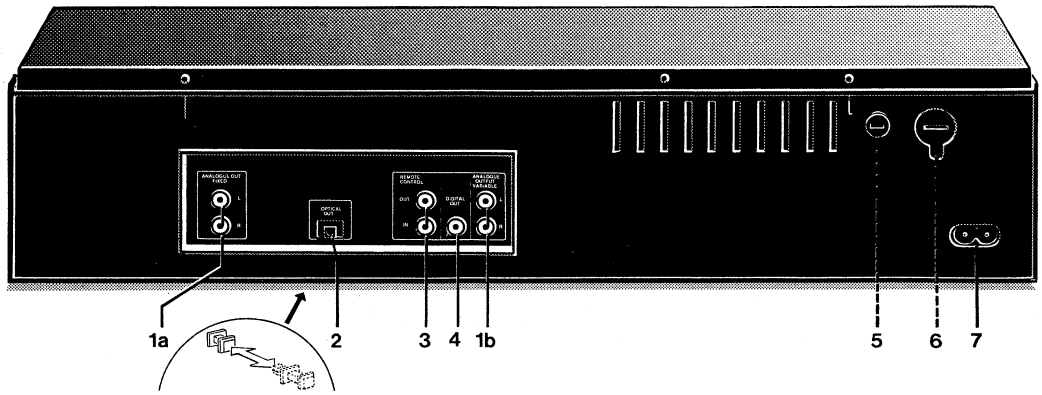
Dimensions and weight

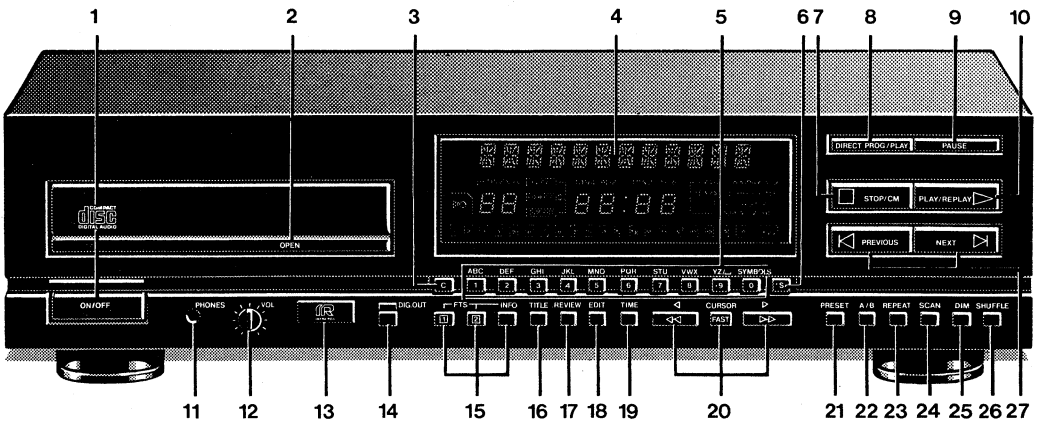
1.	Apparatus tray closed	: WxDxH 420 x 280 x 90/104 mm
2.	Apparatus tray open	: WxDxH 420 x 423 x 90/104 mm
3.	Weight	: 6,3 kg

Optical read-out system

1.	Laser type	: Semiconductor AlGaAs
2.	Wavelength	: 780 nm ±20 nm
3.	Light output (c.w.)	: 0,4 mW ±0,04 mW

CONTROLS AND CONNECTIONS





OPERATION

KEYS

1 On/Off
2 Open
3 C(lear)
4 Display
5 Digit/alphabet keys
6 FTS
7 Stop/CM
8 Direct prog(ram) play
9 Pause
10 Play/replay
11 Phones
12 Vol(ume)
13 IR
14 Dig(ital) out
15 FTS
16 Title
17 Review
18 Edit
19 Time
20 ◁◁ Cursor ▷▷
21 Reset
22 A/B
23 Repeat
24 Scan
25 DIM
26 Shuffle
27 Previous/next

CONNECTIONS

1a Analoque out fixed
b Analoque out variable
2 Optical out
3 Remote control out in
4 Digital out
5 Mains fuse holder
6 Voltage selector
7 Mains lead

WARNINGS

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

ESD

(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(F) ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

(D) WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).
Unsorgfältige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern.
Sorgen sie dafür, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

DISMANTLING INSTRUCTIONS

(GB)
Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(F)
Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

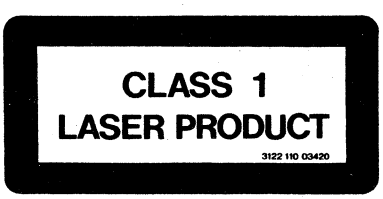
(I)
Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambiago identici a quelli specificati.

(NL)
Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

(D)
Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind Original-Ersatzteile zu verwenden.

(S) Varo!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

(SF) Varning!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad.
Betrakta ej strålen.



SERVICING HINTS

When the tray mechanism and CDM-unit has been disassembled the player can be prepared for measurements by bridging the "tray detection" switch SK2 on the main panel.

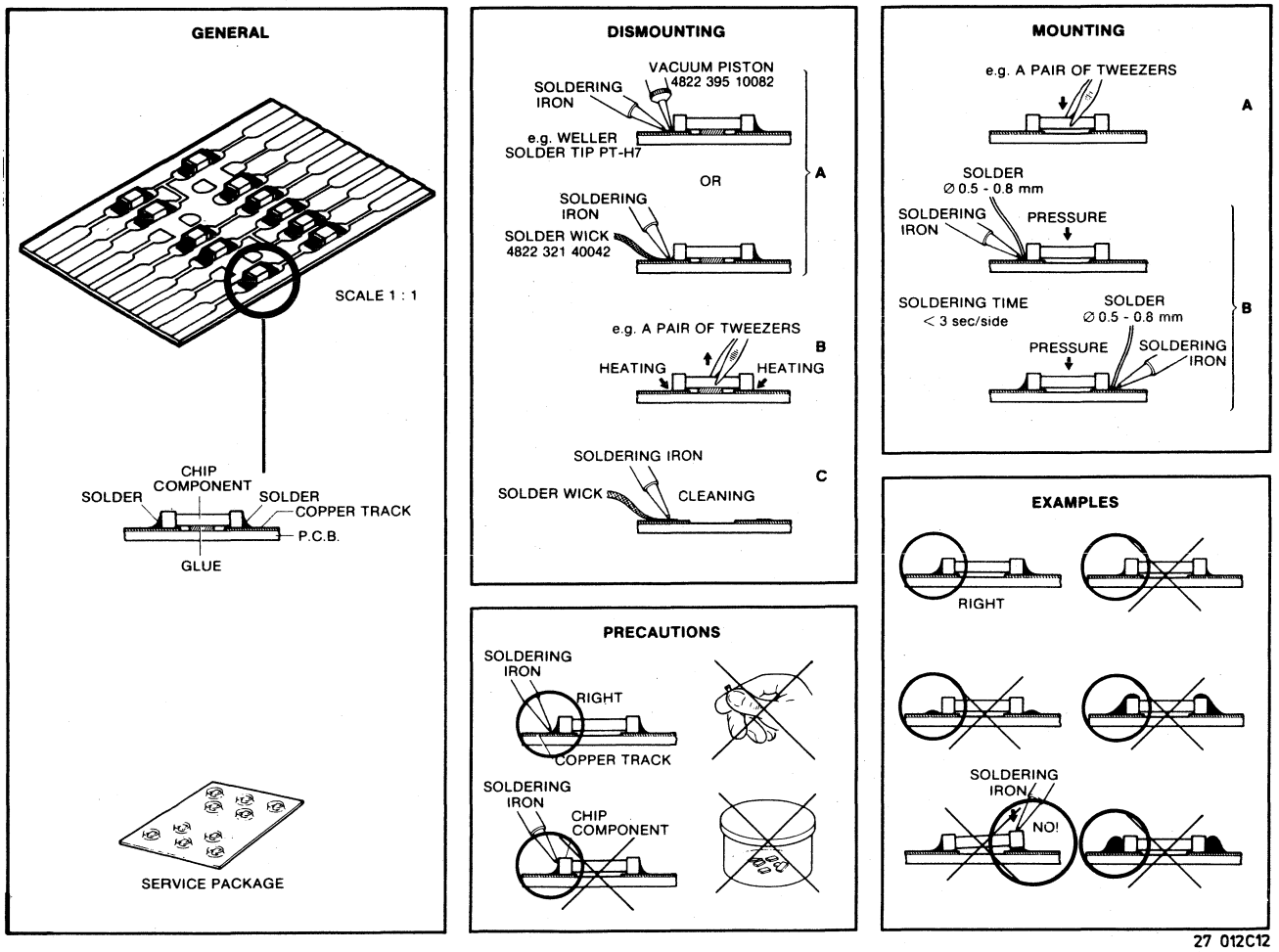
Service disc hold-down

The disc should always rest properly on the turntable. To achieve this a disc hold-down has been mounted in a bracket of the tray mechanism.
If the tray mechanism has to be disassembled for servicing, a separate disc hold-down should be used.
For a service disc hold-down see the figure below.
Compose a service Disc hold-down in the following way.
- –Cut in the most inner ring of a disc holddown (4822 462 50383) with small and sharp nippers See fig. below.
- –Enlarge the diameter of the innermost ring slightly with the hind part of a pencil or ballpoint, so that it jams onto the turntable with sufficient force.
- –If the jamming force decreases after certain time of use, the diameter has to be enlarged with a pencil or ballpoint again.

SERVICE TOOLS

Audio signal disc	4822 397 30184
Disc without errors (test disc 5) + disc with DO errors, black spots and fingerprints (test disc 5A)	4822 397 30096
Max. diameter disc (58.0 mm)	4822 397 60141
Torx screwdrivers	
Set (straight)	
Set (square)	4822 395 50132
13th order filter	4822 395 30204
Service cable (4p)	4822 321 21284
Service flexfoil (14p)	4822 322 40066
Service connector (14p)	4822 267 50676
Green LED CQY G11	5322 130 32182
Infra red remote control e.g.	4822 218 10354

DEMOUNTING CDM



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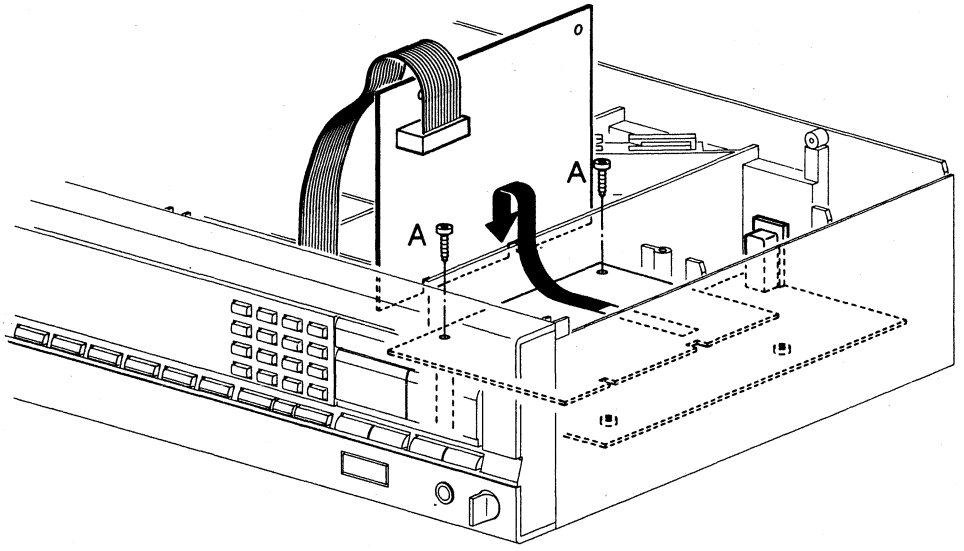
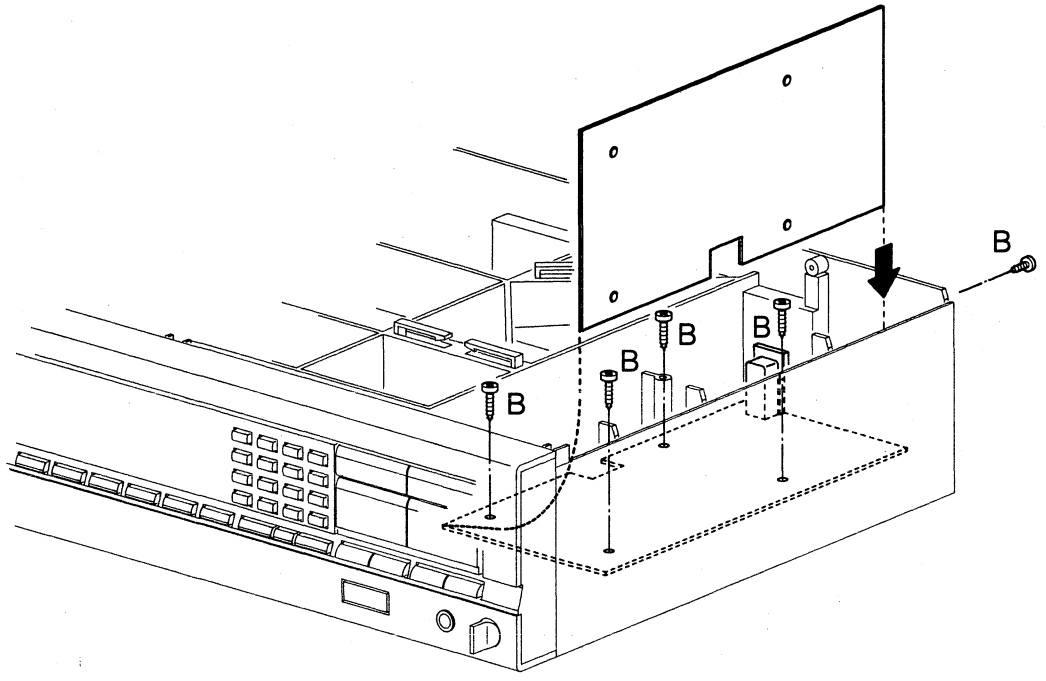
SERVICE HINTS





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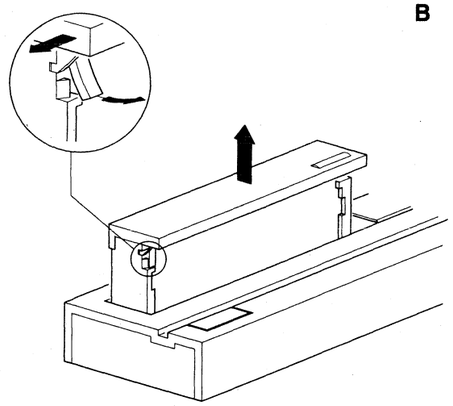
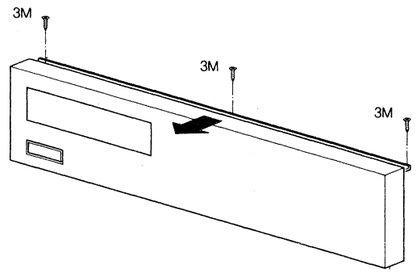
DISASSEMBLY OF THE CABINET AND LOADING

CABINET DISASSEMBLY HINTS

A



B



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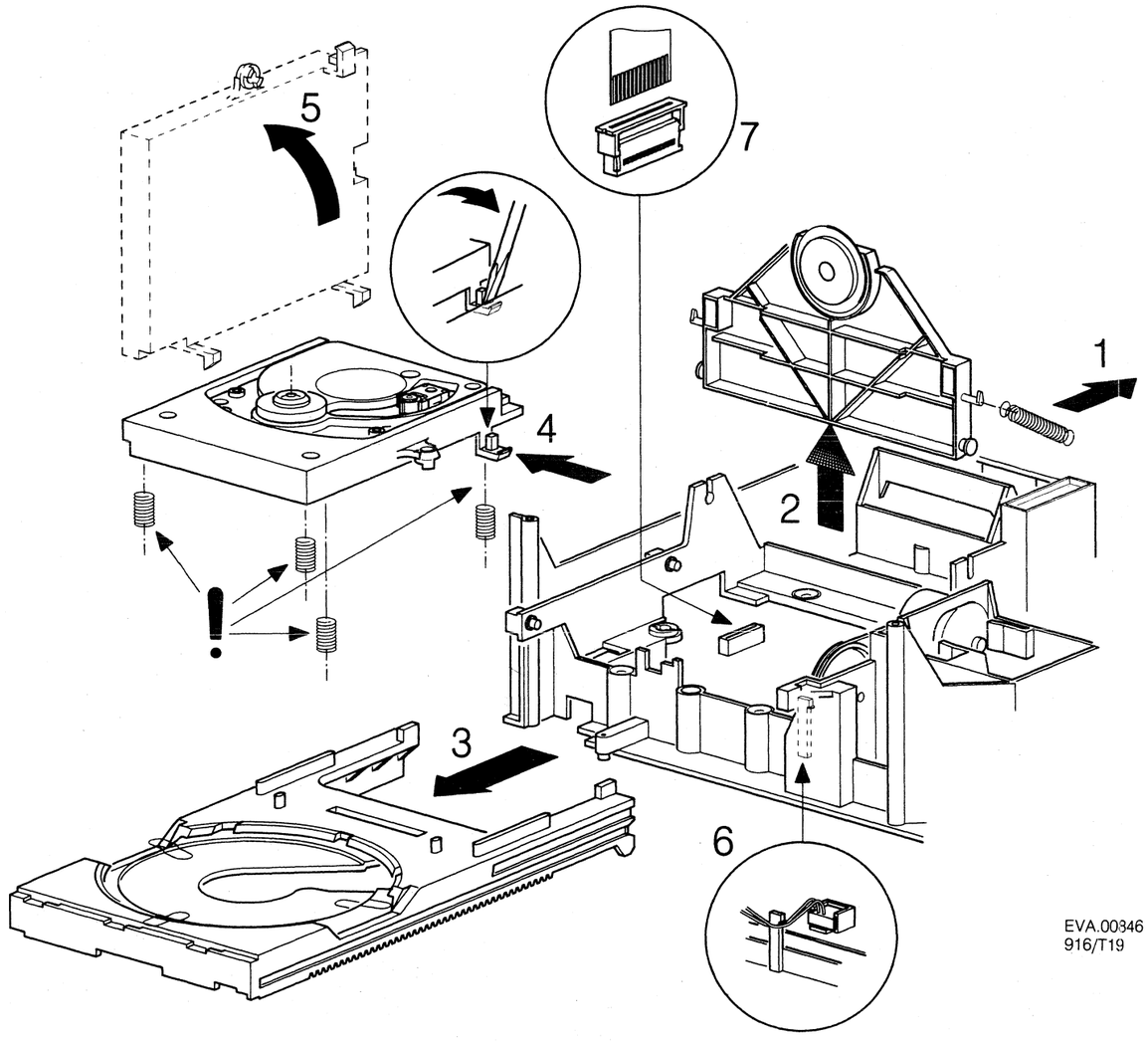

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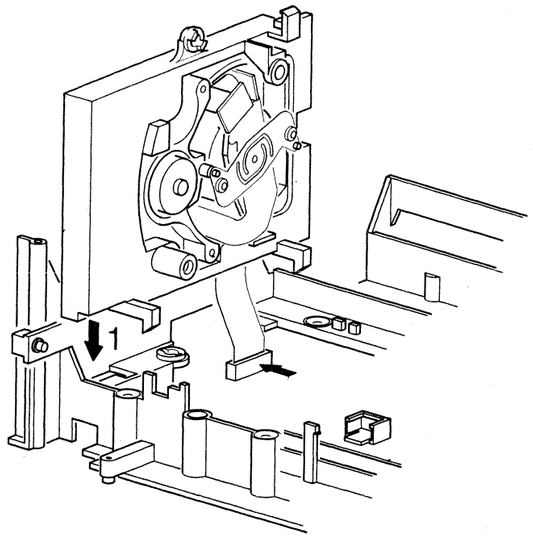
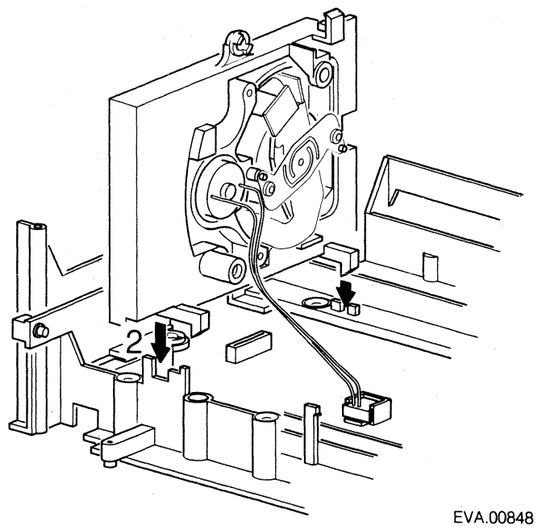
FOIL CONNECTION POSITION



PLAY-SERVICE POSITION



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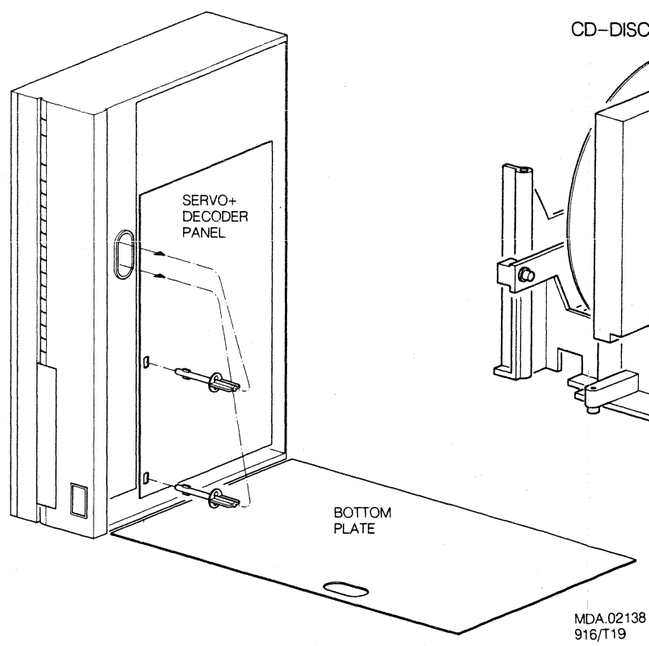
CAUTION
INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM
3104 106 75942

MEASURING AND ADJUSTMENT POSITION



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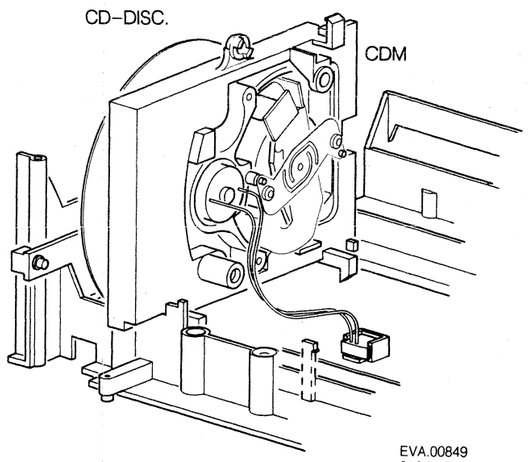
SERVICE POSITION PLAY



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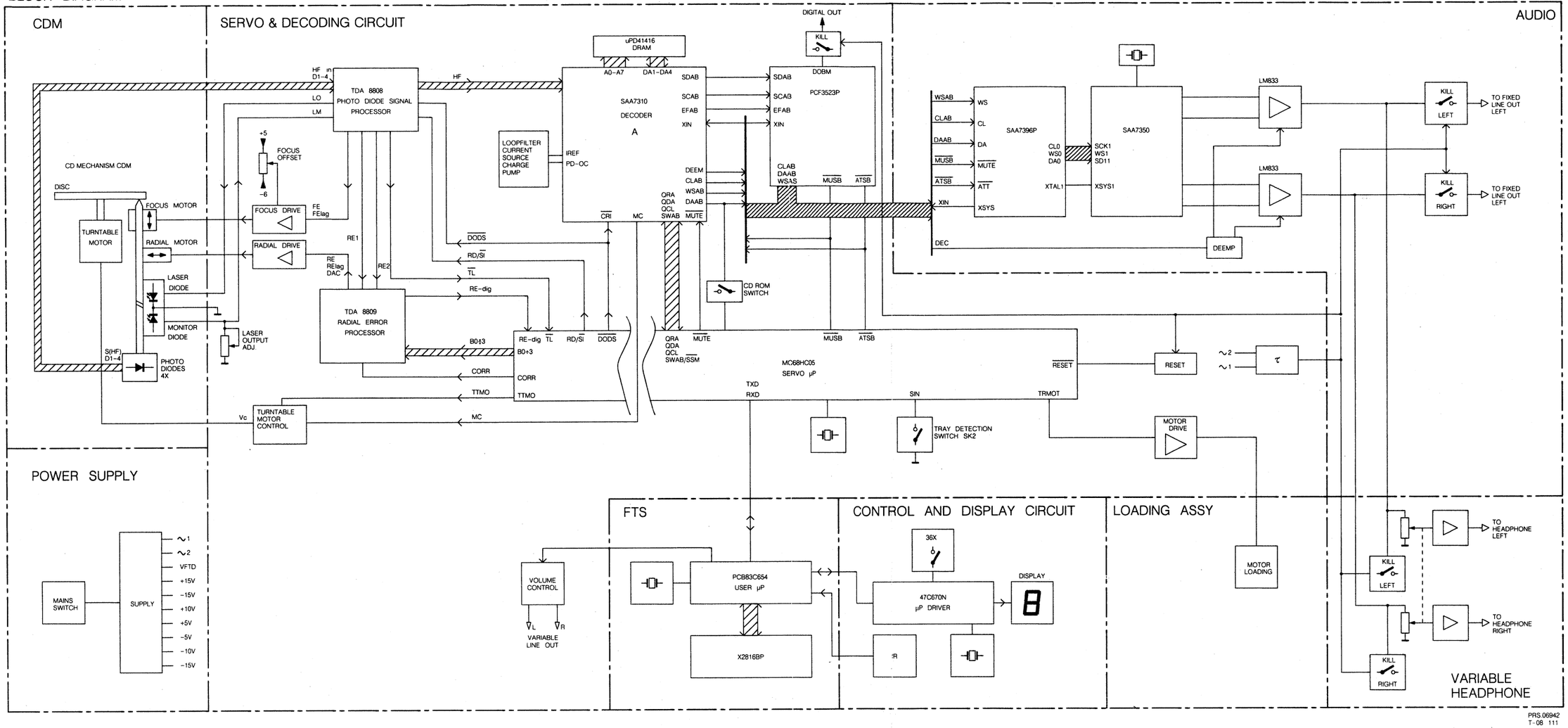
BLOCK DIAGRAM



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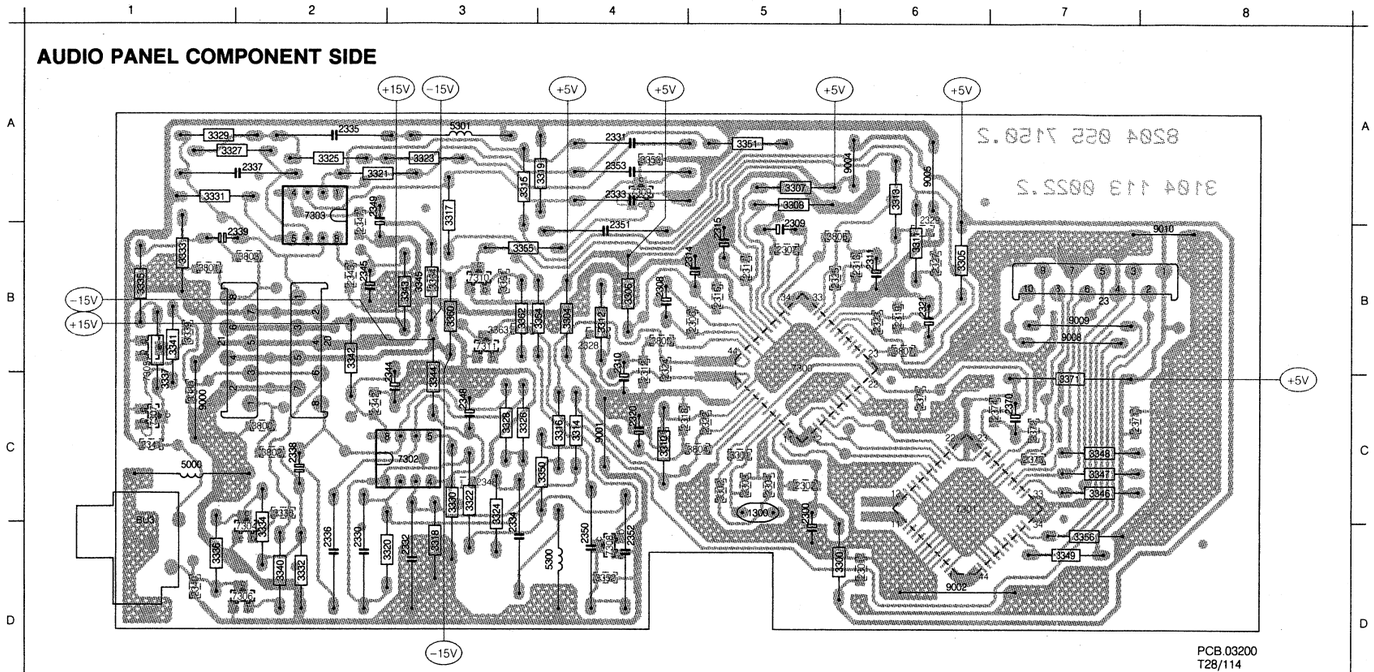
AGC – Automatic Gain Control
ATSB – Attenuation of Audio level in Search position
ATT – Attenuation
B0-B3 – Control bits for radial circuit
BEQ – Equalizer reference current input
BGC – DC and LF gain control reference input
BSW – Bandwidth switch turntable motor circuit
CD ROM – Digital Data information in disc signal switch
CEFM – Clock Eight-to-Fourteen Modulator
CLAB – Clock signal Detector-A to Filter-B
CLBD – Clock signal Filter-B to DAC
CLI – IS serial bit clock input
CORR – 1/2 bit DAC
Cosc1 – Capacitor wobble oscillator
Cosc2 – Capacitor wobble oscillator
CREF – Reference current
CRI – Counter Reset Inhibit
DAAB – Data signal Decoder-A to Filter-B
DABD – Data signal Filter-B to DAC
DAI – IS serial data input
DAO – IS serial data output
DEC – Decoupling input internal bypass
DEEM – Deemphasis
DET – HF detector voltage input

DIV4 – Divide by 4 input
DMUTE – Digital mute
DOBM – Digital out signal
DODS – Drop out detector suppression
D1-4 – Photodiode currents
EFAB – Error flag Decoder-A to Filter-B
FBL+ – Feedback for left positive (negative) switched- capacitor integrator
FBR+ – Feedback for right positive (negative) switched- capacitor integrator
FE – Focus error signal
FE lag – Focus error signal for LAG network
HF – HF output for DEMOD
HFD – HF detector output for DEMOD
HF-in – HF current input to HF amplifier
HF-out – HF amplifier and equalizer voltage output
IDF1-3 – Input data format
INTL+ – Output from left positive (negative) switched- capacitor integrator
INTR+ – Output from right positive (negative) switched- capacitor integrator
LM – Laser monitor diode input
LO – Laser amplifier current output
MC – Motor control signal
MCES – Motor speed control
MUSB – Soft mute signal

MUTE – Mute signal
OALO – Operational ampl. left output
OARO – Operational ampl. right output
Offset IN – Offset control input
Offset OUT – Offset control output
PD/OC – Phase detector - oscillator control
PLLH – PLL on hold reset
QCL – Q-channel clock signal
QDA – Q-channel data signal
QRA – Q-channel request aknowledge
RADout – Output of RE2-RE1 input
RE – Radial error signal (Amplified RE2-RE1 currents)
Rosc – Resistor wobble oscillator
Rwob – Wobble generator input
RE1 – Radial error signal 1
RE2 – Radial error signal 2
RE dig – Radial error digital
RE lag – Radial error signal for LAG network
Sc – Starting up capacitor input
SCAB – Subcode clock Decoder-A to Filter-B
SCKI – Bit clock input for serial input interface
SDAB – Subcode data Decoder-A to Filter-B
SDI1-2 – Serial data input
SIN – Tray switch

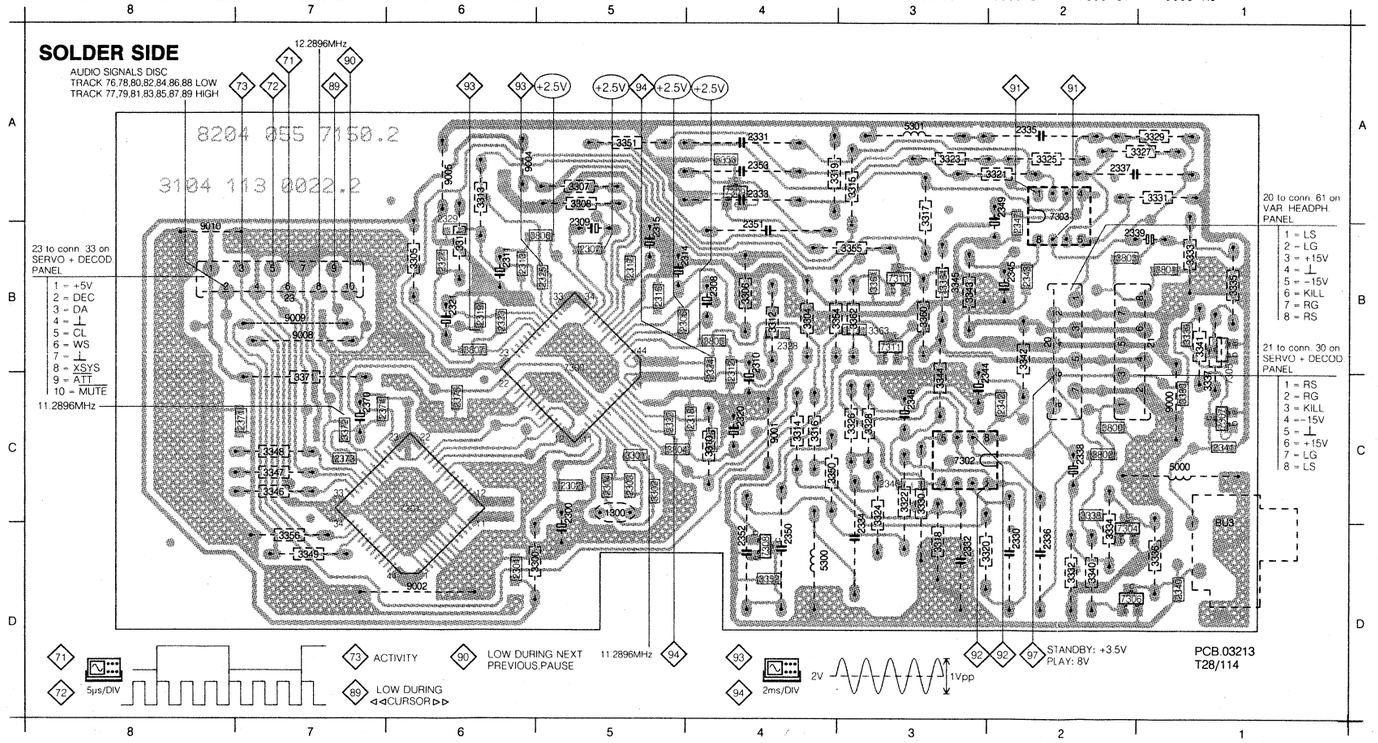
Si/RD – On/off control for laser supply and focus circuit. Ready signal. Starting up procedure succesfull
SWAB/SSM – Subcode word/start-stop motor signal
TL – Track loss output signal
TRMOT – Tray motor drive
TTM+ – Control voltage for turntable motor
TTM- – Control voltage for turntable motor
TTMO – Motor offset and bandwidth switch
VDACL-R – Reference voltage supply left(right) channel DAC
Vext+ – Supply connection
Vext – Supply connection
VRCL-R – High impedance voltage refence for left (right) channel inputs
VROL-R – Left (right) channel voltage reference output
WSAB – Word select Decoder-A to Filter-B
WSBD – Word select Filter-B to DAC
WSI – IS word select input
WSO – IS word select output
XIN – Oscillator signal in Decoder-A
XOUT – Oscillator output
XSEL – Crystal frequency select
XSYS – Oscillator signal

AUDIO PANEL COMPONENT SIDE

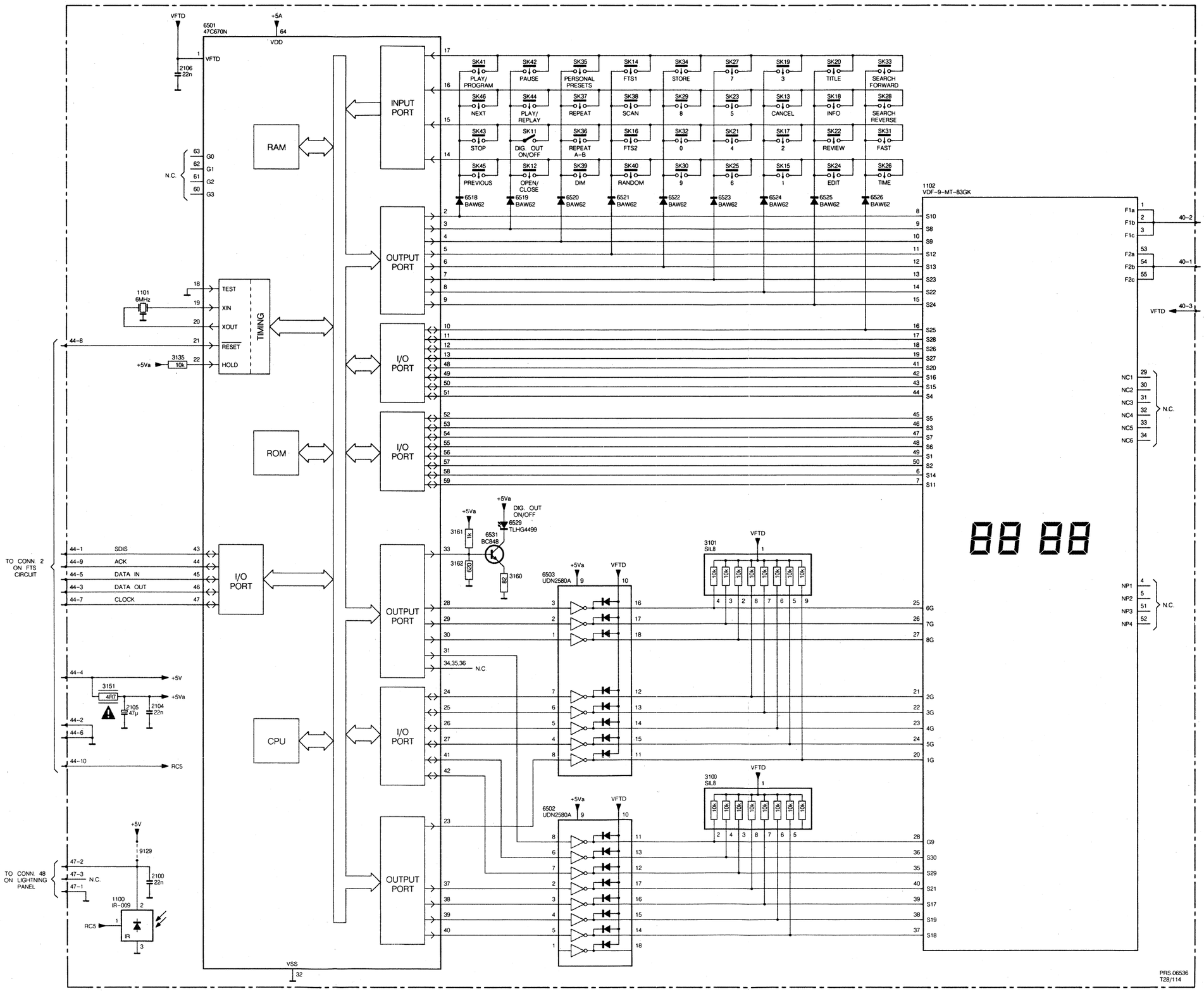


	1		2		3		4		5		6		7			8			
20 B2	2307 B5	2318 C4	2329 B6	2340 D1	2351 B4	3304 B4	3316 C4	3327 A1	3338 C2	3349 D7	3363 B3	3806 B5	7306 D1	9008 B7					
21 B1	2308 B4	2319 B6	2330 D2	2341 C1	2352 D4	3305 B6	3317 B3	3328 C3	3339 B1	3350 C4	3364 B3	3807 B6	7307 C1	9009 B7					
23 B7	2309 B5	2320 C4	2331 A4	2342 C2	2353 A4	3306 B4	3318 D3	3329 A1	3340 D2	3351 A5	3371 C7	5000 C1	7308 D4	9010 B8					
BU3 D1	2310 C4	2321 B6	2332 D3	2343 B2	2370 C7	3307 A5	3319 A4	3330 C3	3341 B1	3352 D4	3372 C7	5300 D4	7309 A4						
1300 C5	2311 B6	2322 C5	2333 A4	2344 C3	2371 C7	3308 A5	3320 D3	3331 A1	3342 B2	3353 A4	3380 C1	5301 A3	7310 B3						
2300 D5	2312 C4	2323 B6	2334 D3	2345 B2	2373 C7	3310 C4	3321 A2	3332 D2	3343 B3	3354 B4	3800 C2	7300 B5	7311 B3						
2301 D6	2313 B6	2324 C4	2335 A2	2346 C3	2374 C7	3311 B6	3322 C3	3333 B1	3344 C3	3355 B3	3801 B1	7301 C6	9000 C1						
2302 C5	2314 B5	2325 B5	2336 D2	2347 B2	2375 C6	3312 B4	3323 A3	3334 D2	3345 B3	3356 D7	3802 C2	7302 C3	9001 C4						
2303 C5	2315 B5	2326 C4	2337 A2	2348 C3	3300 D6	3313 A6	3324 D3	3335 B1	3346 C7	3360 B3	3803 B2	7303 A2	9002 D6						
2304 C5	2316 B5	2327 B6	2338 C2	2349 A2	3301 C5	3314 C4	3325 A2	3336 D1	3347 C7	3361 B3	3804 C4	7304 D1	9004 A6						
2306 B5	2317 B5	2328 B4	2339 B1	2350 D4	3302 C5	3315 A3	3326 C3	3337 C1	3348 C7	3362 B3	3805 B4	7305 C1	9005 A6						

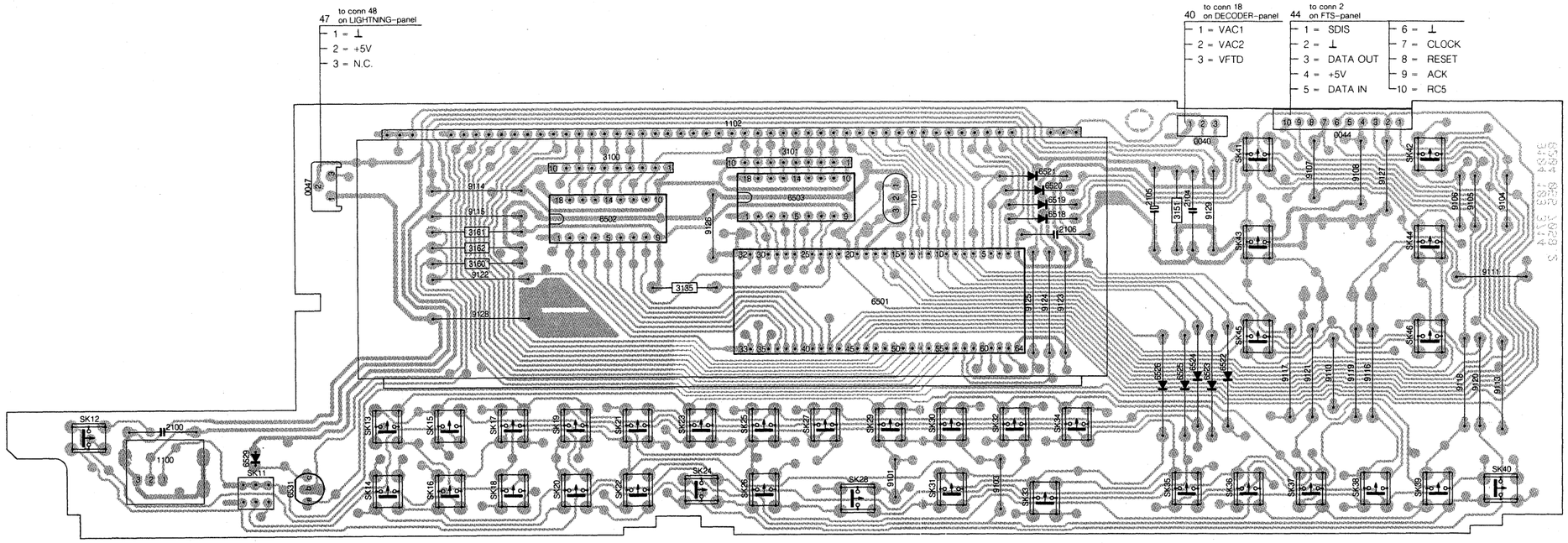
SOLDER SIDE



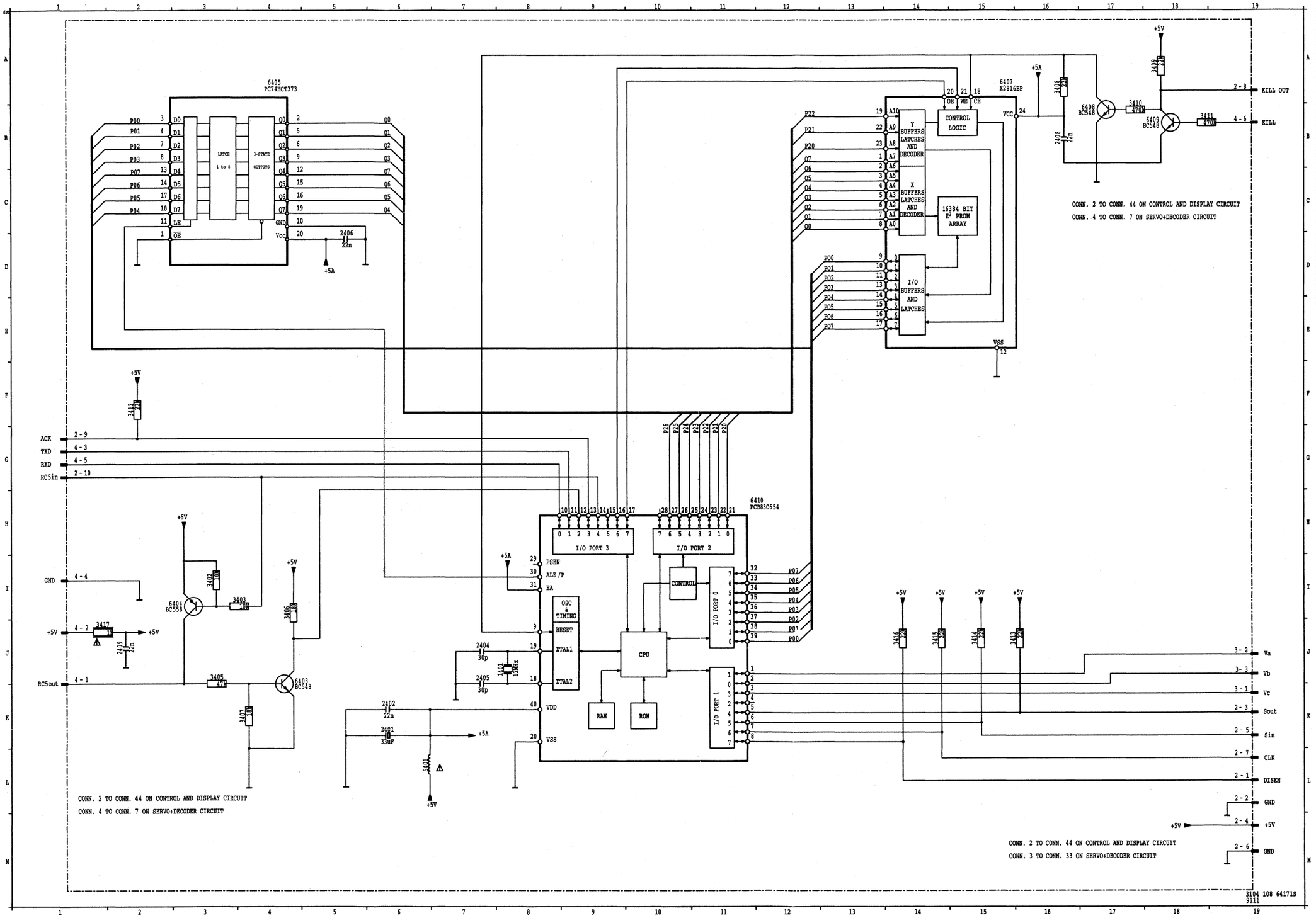
CONTROL AND DISPLAY CIRCUIT DIAGRAM



CONTROL AND DISPLAY PANEL



MICROPROCESSOR AND FTS CIRCUIT DIAGRAM



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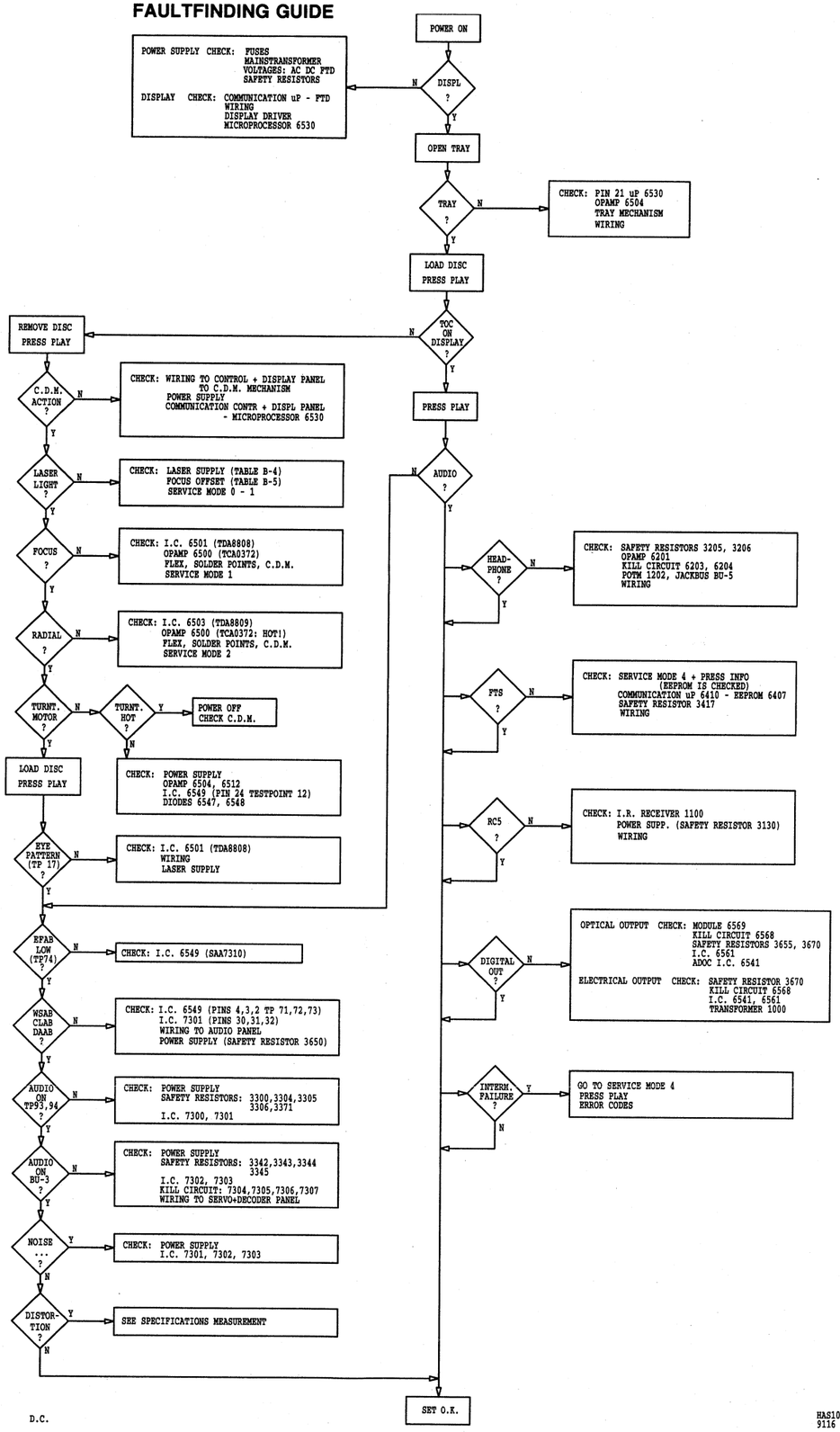
FAULTFINDING GUIDE



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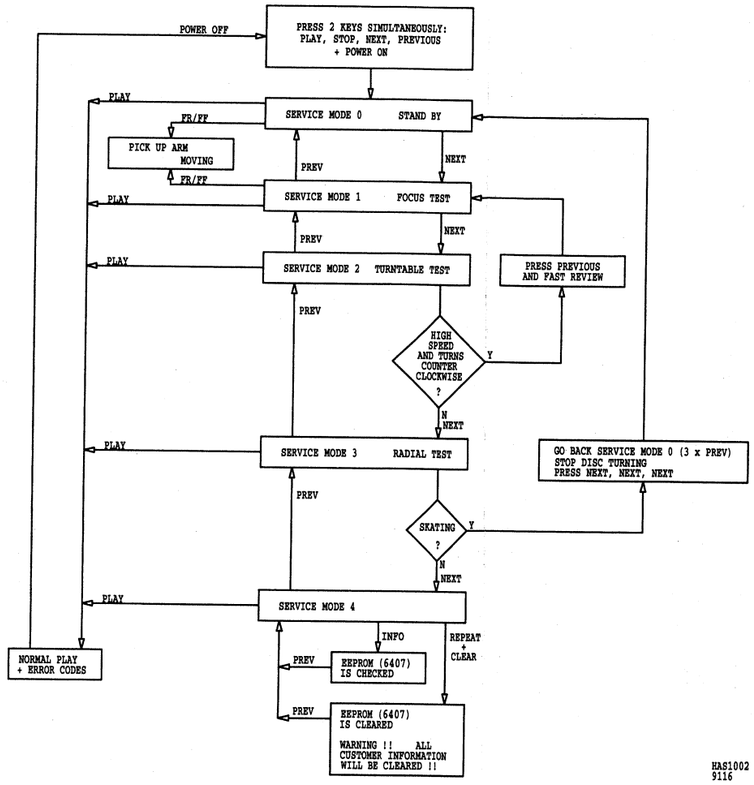
SERVICE TESTPROGRAM



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ERROR CODE TABLE

SYSTEM ERRORS

ERROR 01	Tray error
ERROR 02	Focus error
ERROR 03	Radial error
ERROR 04	Too many TL
ERROR 05	TL low to long
ERROR 06	Jump error
ERROR 07	Subcode error
ERROR 08	TOC error

OPERATING ERRORS

ERROR 10	Selected track not accessible
ERROR 11	Relative time not accessible
ERROR 12	Absolute time not accessible
ERROR 30	Next operated during last track without repeat
ERROR 31	Previous operated during last track without repeat
ERROR 42	Selected track does not exist

B-3 CHECK OF THE PHOTODIODES

Step	Signal	Mode	◇				Remarks
1	D2 D1 D3 D4	power on	④ ⑥ ⑦ ⑧	–	–	signal 4≡6≡7≡8	Signal depends on Distance lens ↔ IR LED of remote control

T-22407A

B-4 CHECK OF LASER SUPPLY

The laser, the lasersupply plus the monitor diode form a feedback system.
A defect in the lasersupply may result in the destruction of the laser. If, in that case, the laser is replaced, (= complete D.C.M.-unit) the new laser will also become defective. However, it is impossible to check and repair a feedback system if a link is missing. For this reason the laser supply can be checked with teh replacement circuit for laser assembly.

Step	Signal	Mode	◇		Remarks
1	LO	serv. pos. 2 SK	⑨ V	1.8<V <2.3	
	LM		⑪ V	170<mV <220	PRS05539
2	LO	serv. pos. 2 SK	⑨ V	1.8<V <2.3	
	LM		⑪ V	170<mV <220	PRS05540
3	LO	Power on	⑨ V	0V ± 0.2V	No light

T-22407B

B-4 LASER CURRENT ADJUSTMENT

STEP	SIGNAL	MODE	◇				REMARKS
1	--	POWER OFF	--	--	--	--	CHECK IF FLEX-FOIL IS PROPERLY CONNECTED
2	--	POWER OFF	⑪ Ω	R3520	1kΩ +10% −0	--	PRE ADJUSTMENT OHMIC VALUE
3	--	POWER OFF	--	R3568	--	--	SET TO MID-POSITION
4	LASER CURRENT ≡ VOLTAGE ACROSS R3501	TEST DISC 5A PLAY	① V ② mV DC	--	⩾15mV	--	IF < 15mV THEN GO TO STEP 3 AND SET R3568 TO 1/4 OR 3/4. TRY AGAIN
5	LASER CURRENT ≡ VOLTAGE ACROSS R3501	TEST DISC 5A PLAY	① V ② mV DC	R3520	50mV	--	--
6	FE-LAG	TEST DISC 5A TRACK 1 PLAY	㉗ V mV DC	R3568	400mV	--	FINE ADJUSTMENT

MDA 02640
T 05/016

B-5 ADJUSTMENT OF FOCUS-OFFSET

Step	Signal	Mode	◇				Remarks
1	–	Power on no disc	–	R3568	–	–	adjust for optical mid-position of the focus motor
2	FE LAG	Play Test disc 5 Track 1	27	R3568	400mV ± 40 mV DC	–	fine adjustment

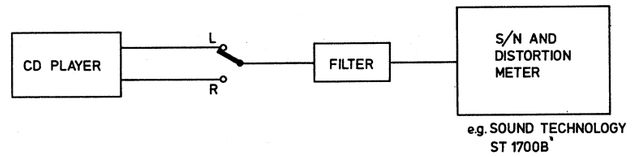
T-22407D

D-6 SPECIFICATIONS MEASUREMENT

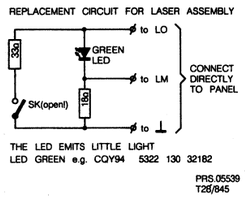
Signal	Mode	◇			Remarks
BU2-L	Test disc 3, play, total harmonic distorsion	filter output	See technial data		See drawing 30459A12
BU2-R	Test disc 3, play, total harmonic distorsion	filter output	See technial data		See drawing 30459A12
BU2-L	Test disc 3, play signal-to-noise ratio	filter output	See technial data		See drawing 30459A12
BU2-R	Test disc 3, play signal-to-noise ratio	filter output	See technial data		See drawing 30459A12

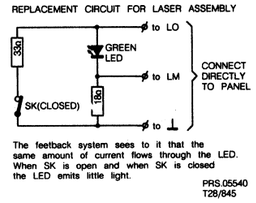
T-22387M

Filter = 13th order filter 4822 395 30204

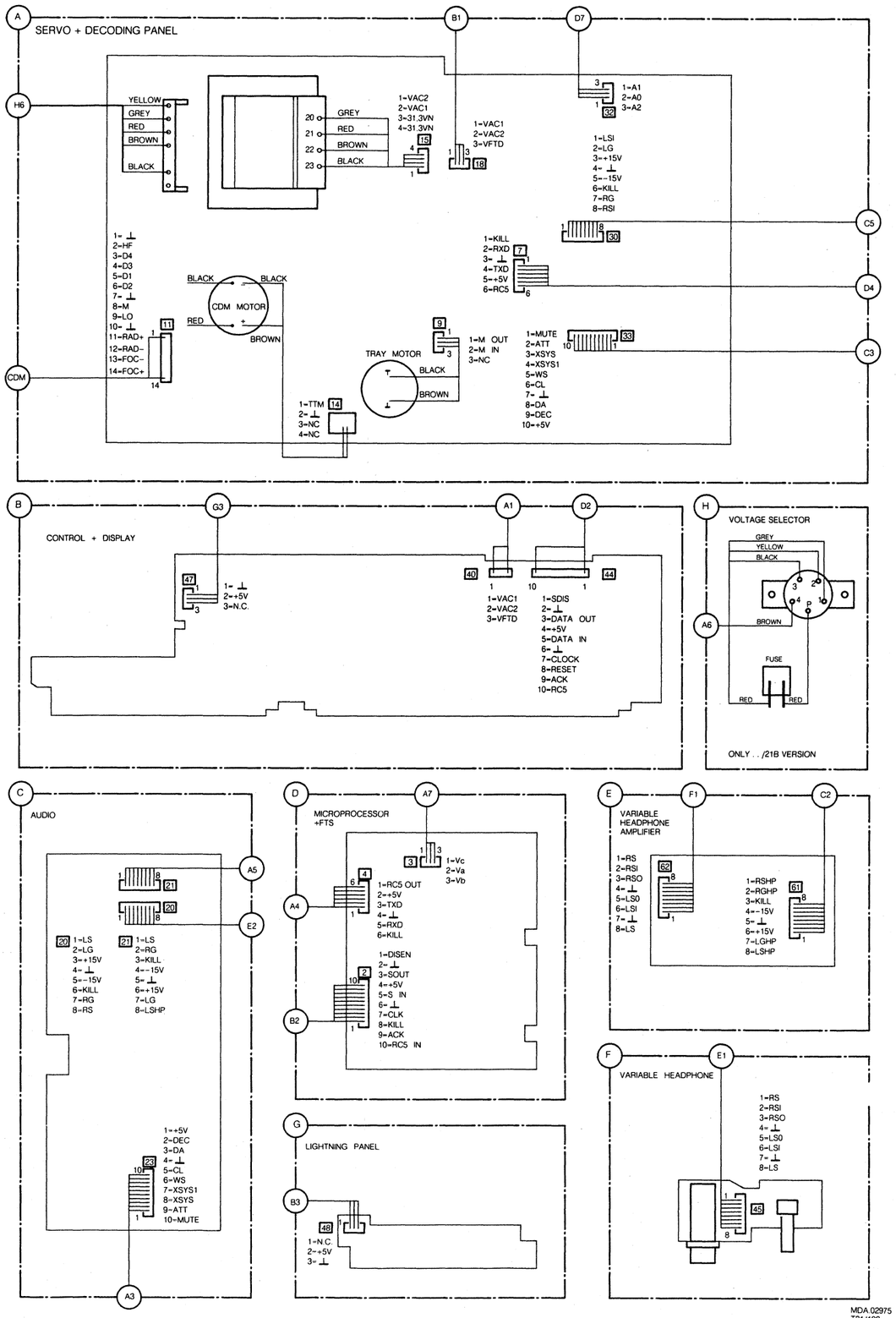


30 459 A12



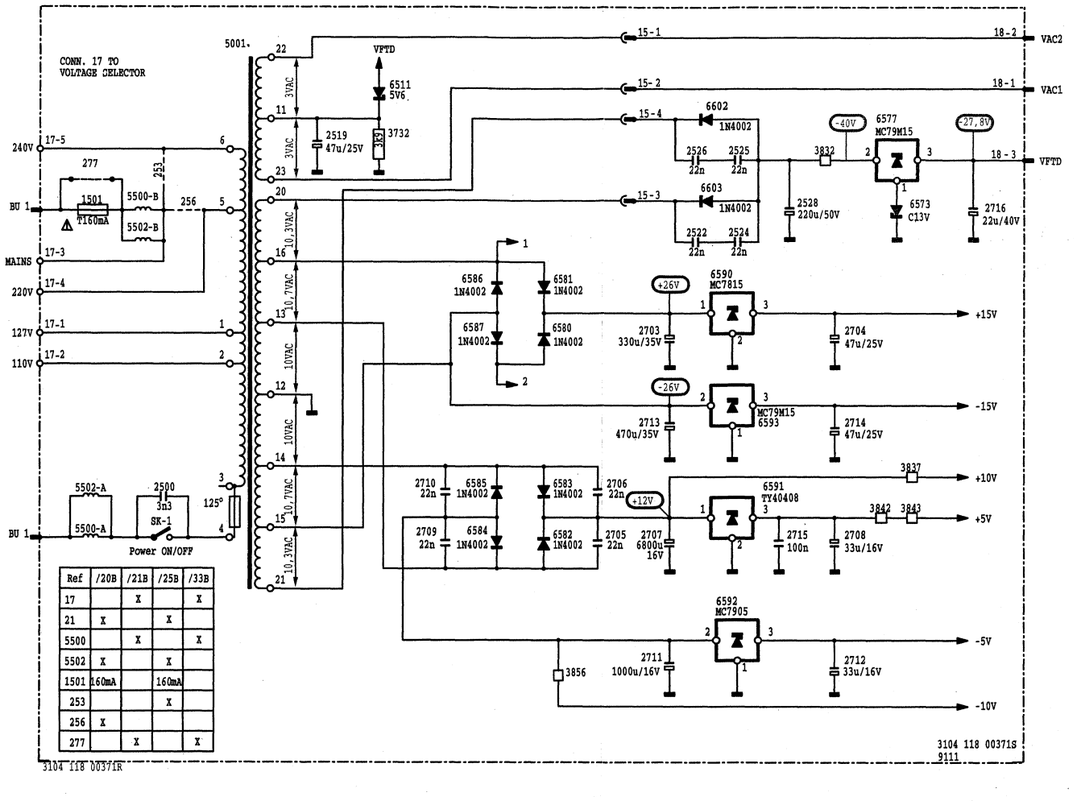

REPLACEMENT CIRCUIT FOR LASER ASSEMBLY
33Ω
GREEN LED
to LO
to LM
to ⊥
CONNECT DIRECTLY TO PANEL
SK(CLOSED)
18Ω
The feetback system sees to it that the same amount of current flows through the LED. When SK is open and when SK is closed the LED emits little light.
PRS.05540
T28/845

WIRING DIAGRAM

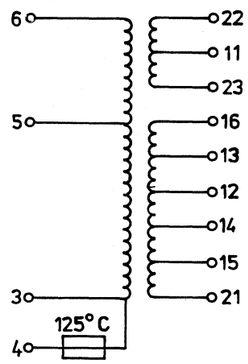


MDA 02975
T21/108

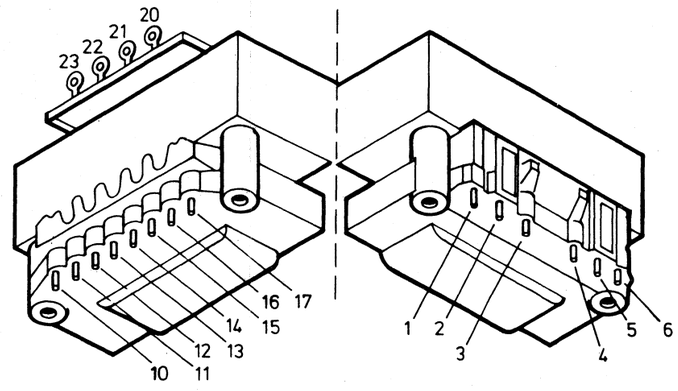
POWER SUPPLY



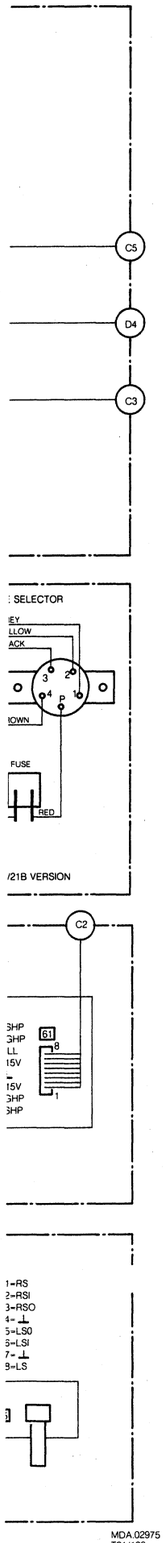
TRANSFORMER CONNECTIONS



THERMAL FUSE
4822 252 20017

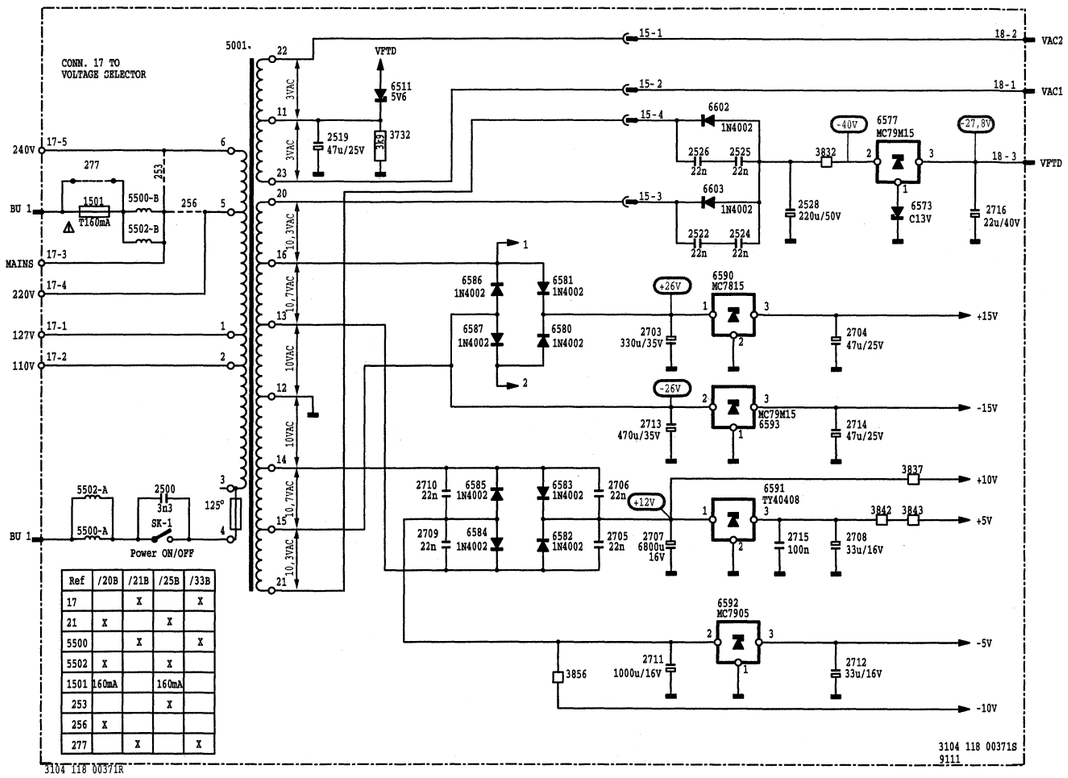


44 737 A11



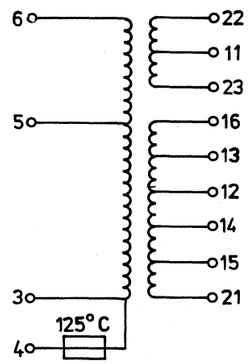
MDA.02975
T21/108

POWER SUPPLY

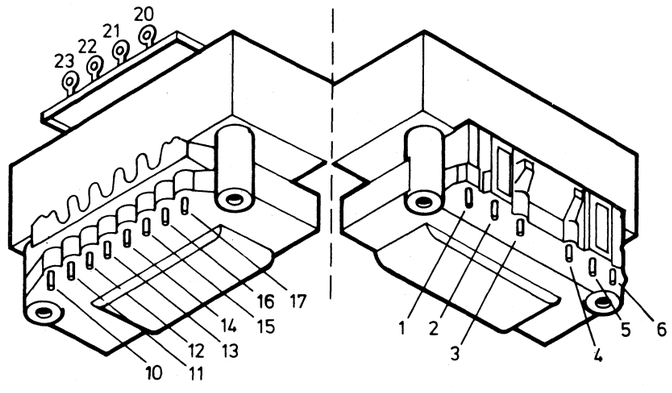


Ref	/20B	/21B	/25B	/33B
17		X		X
21	X		X	
5500		X		X
5502	X		X	
1501	160mA		160mA	
253			X	
256	X			
277		X		X

TRANSFORMER CONNECTIONS

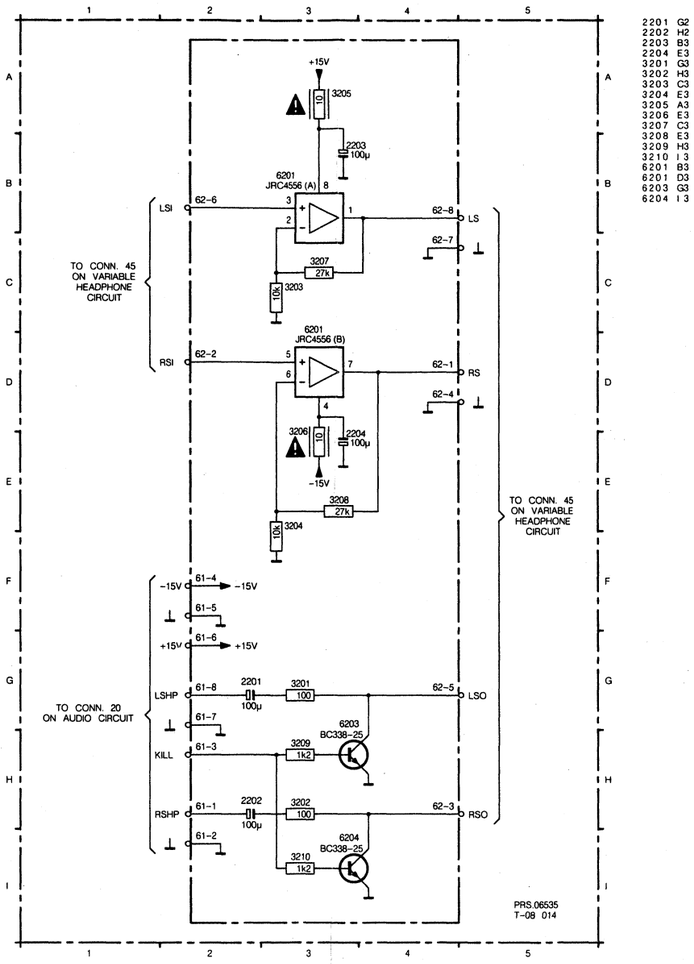


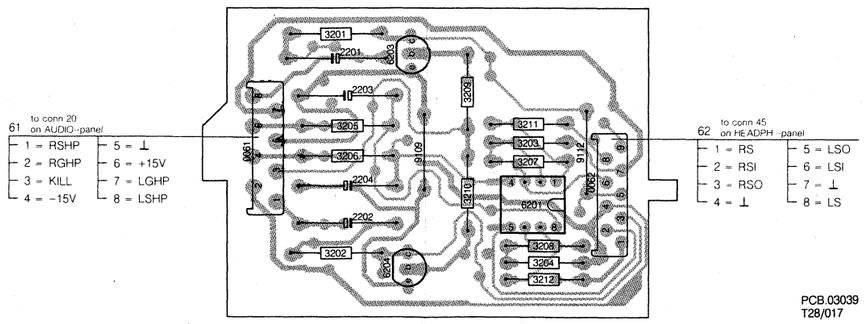
THERMAL FUSE
4822 252 20017



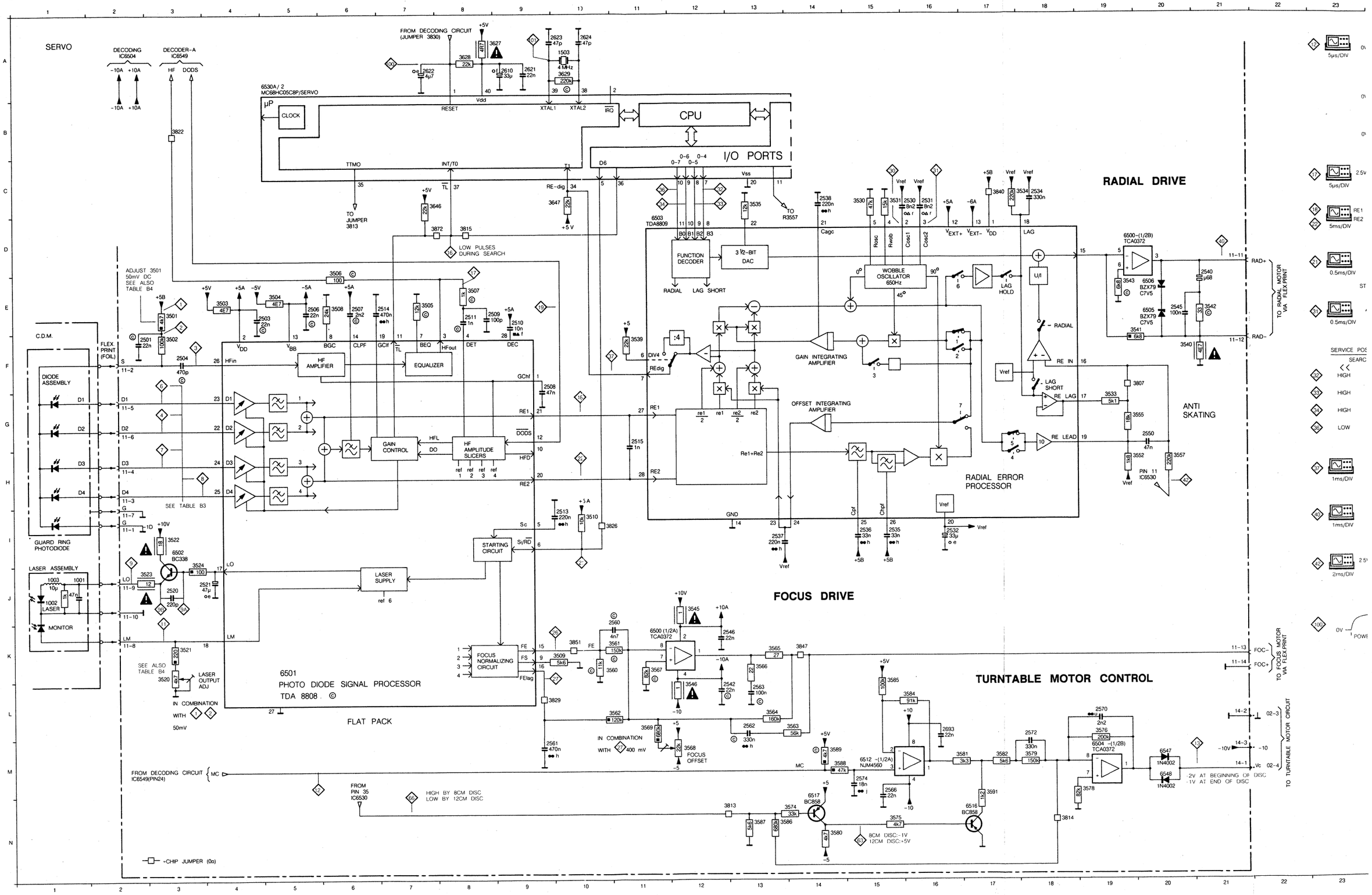
44 737 A11

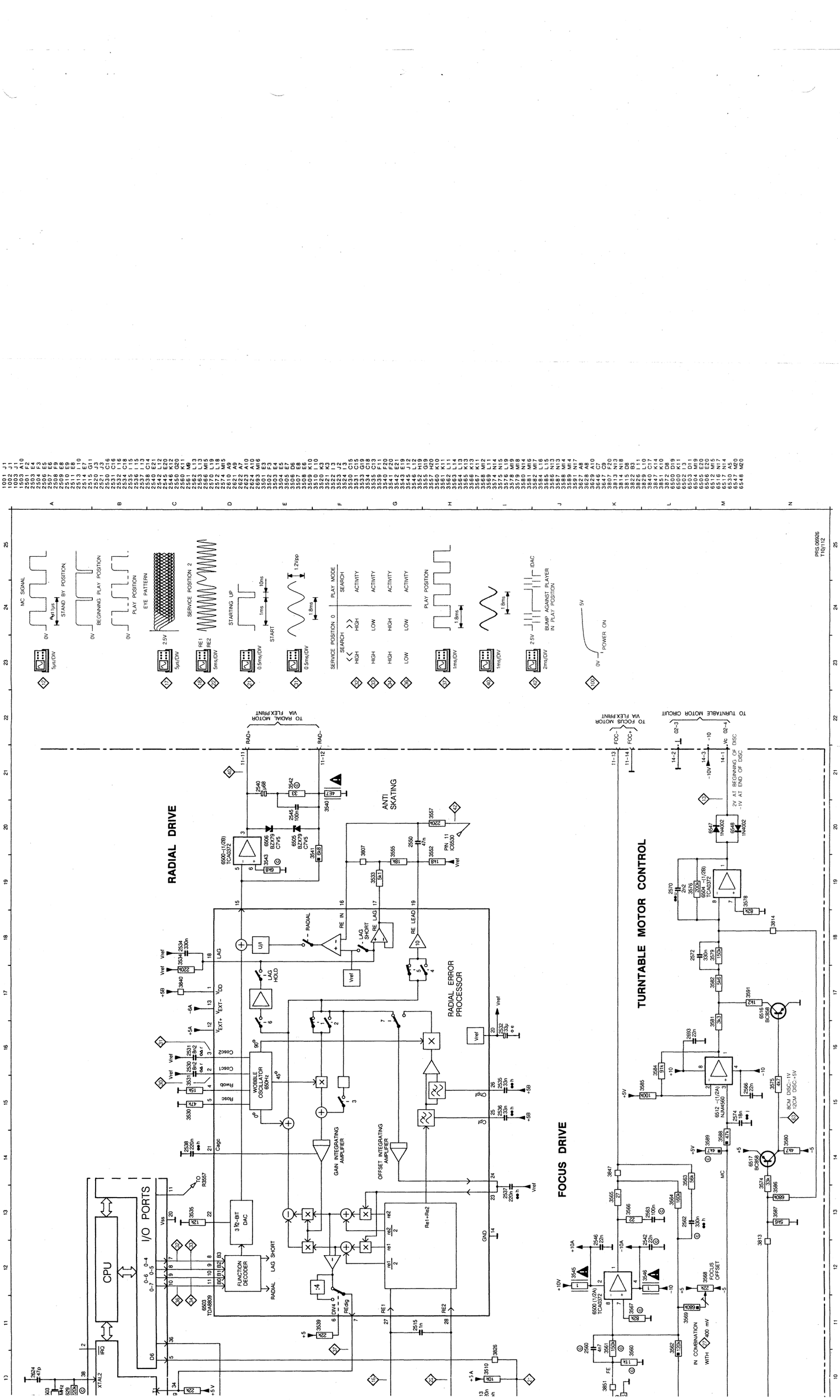
VARIABLE HEADPHONE AMPLIFIER



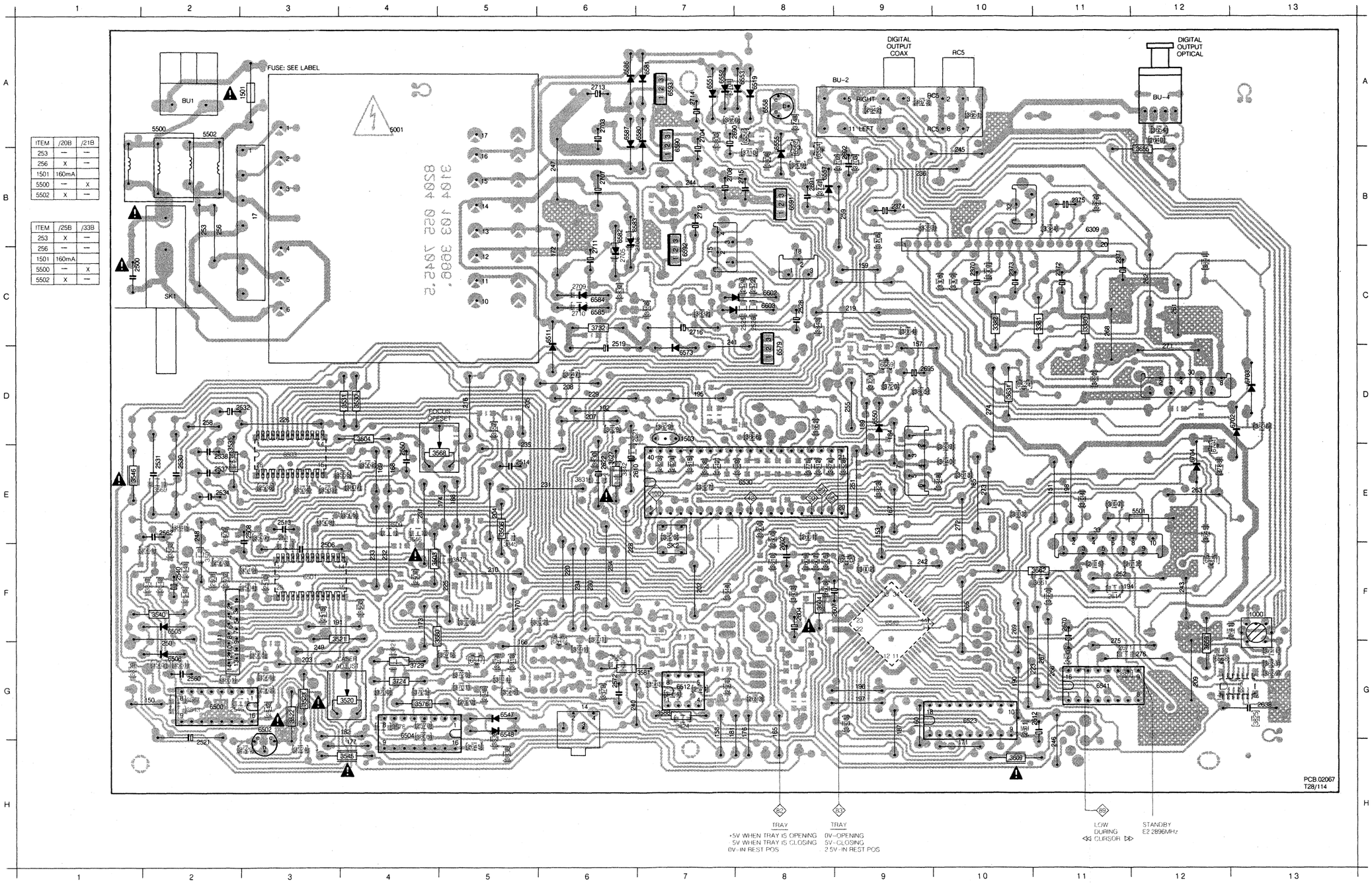


SERVO CIRCUIT DIAGRAM




MC SIGNAL
STAND BY POSITION
BEGINNING PLAY POSITION
PLAY POSITION
EYE PATTERN
SERVICE POSITION 2
STARTING UP
START
SERVICE POSITION 0
PLAY MODE
SEARCH
ACTIVITY
PLAY POSITION
BUMP AGAINST PLAYER IN PLAY POSITION
POWER ON
RADIAL DRIVE
FOCUS DRIVE
TURNTABLE MOTOR CONTROL
ANTI SKATING
RADIAL ERROR PROCESSOR
WOBBLE OSCILLATOR 650Hz
GAIN INTEGRATING AMPLIFIER
OFFSET INTEGRATING AMPLIFIER
FUNCTION DECODER
3 1/2-BIT DAC
CPU
I/O PORTS
TO RADIAL MOTOR VIA FLEX PRINT
TO FOCUS MOTOR VIA FLEX PRINT
TO TURNTABLE MOTOR CIRCUIT
2V AT BEGINNING OF DISC
-1V AT END OF DISC
8CM DISC:-1V
12CM DISC:+5V
IN COMBINATION WITH 400 mV
FOCUS OFFSET
PRS.06826
T10/112

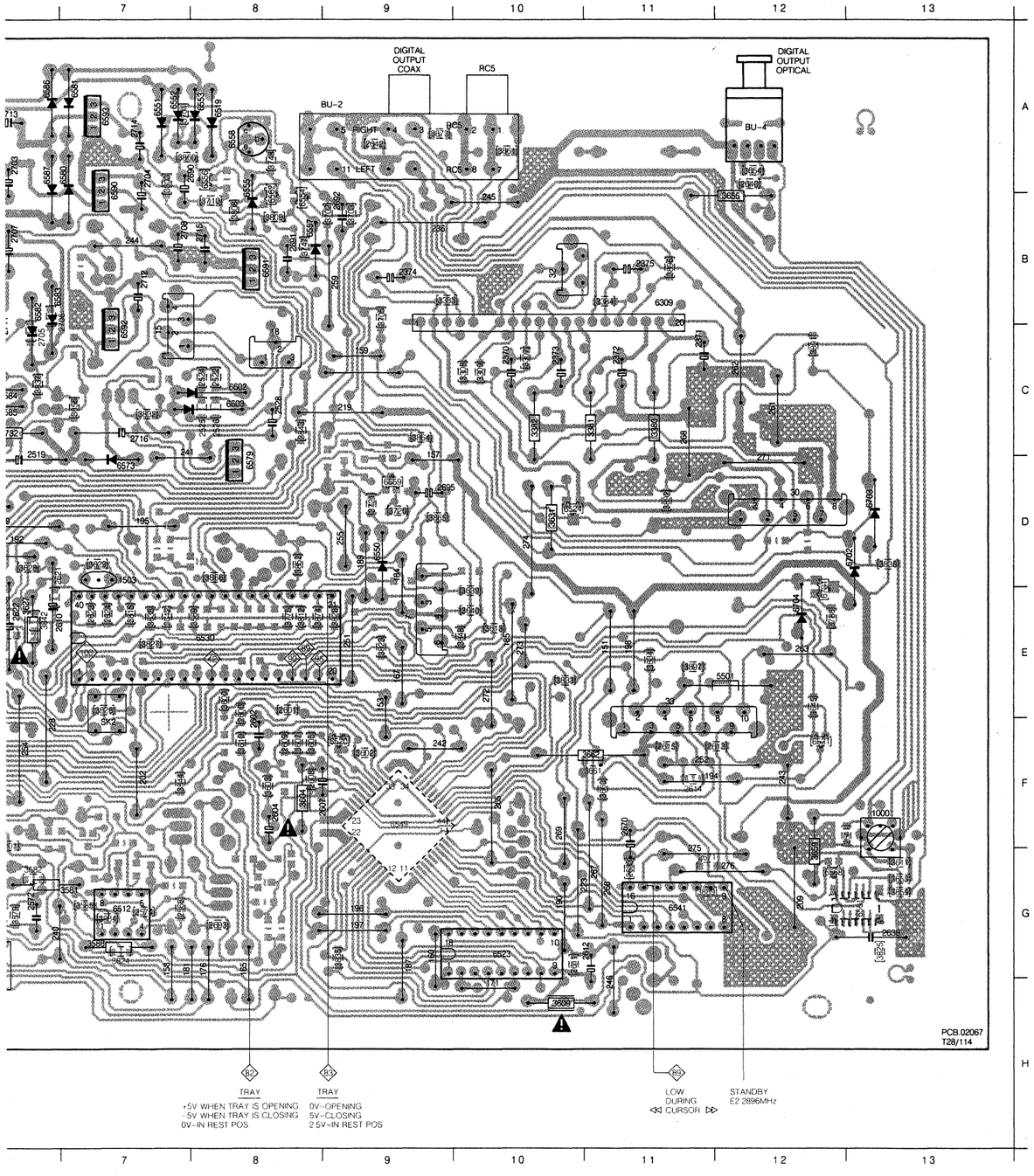
SERVO DECODER PANEL COMPONENT SIDE



ITEM	/20B	/21B
253	—	—
256	X	—
1501	160mA	
5500	—	X
5502	X	—

ITEM	/25B	/33B
253	X	—
256	—	—
1501	160mA	
5500	—	X
5502	X	—

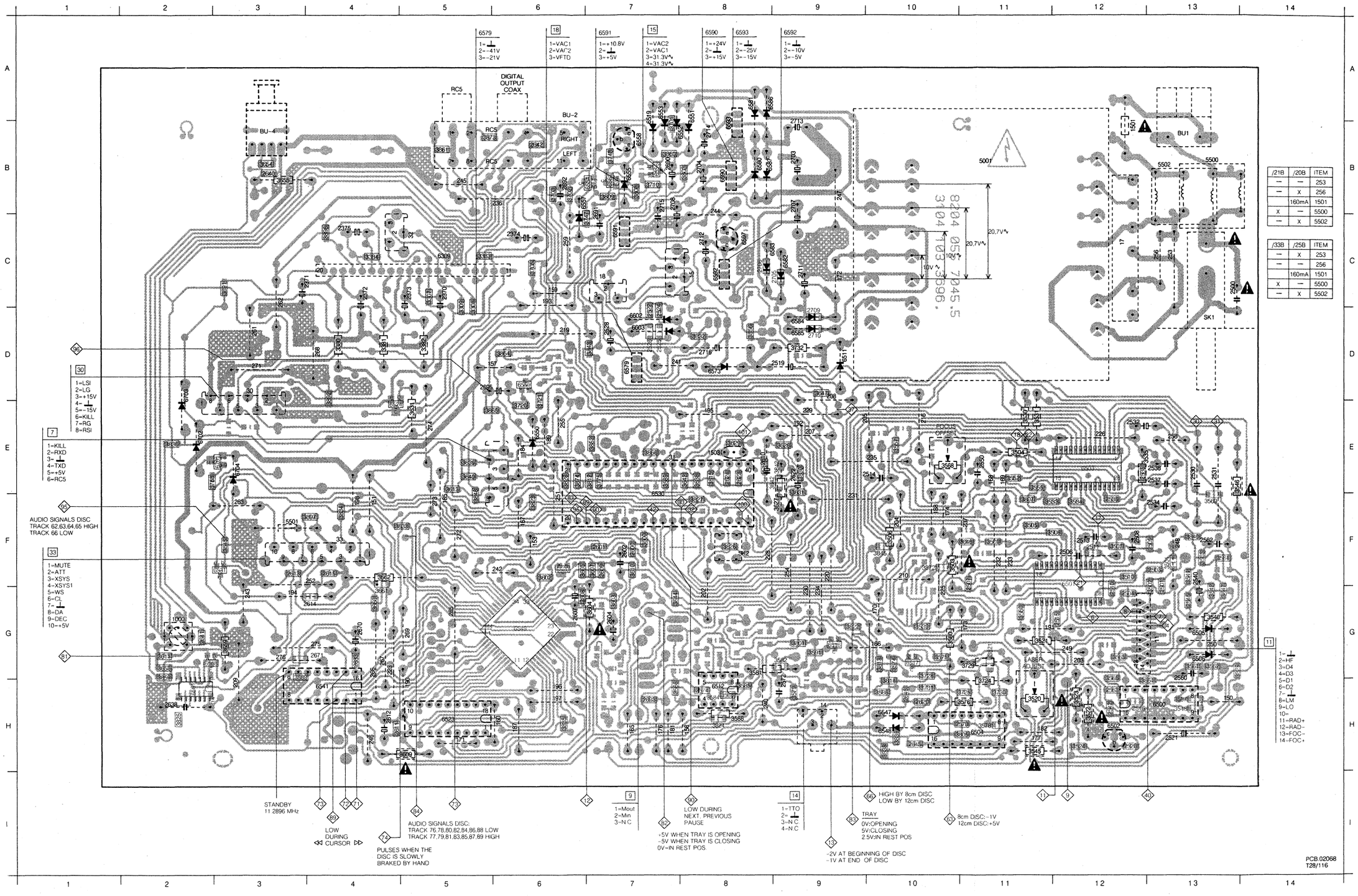
7	E9	2511 E3
11	F2	2513 E3
14	G6	2514 E5
15	C7	2515 F3
17	B3	2519 D6
18	C8	2520 H2
30	D12	2521 H2
32	B10	2522 C8
33	E11	2524 C8
150	G1	2525 C8
151	E11	2526 C8
153	F9	2528 C8
157	D9	2530 E2
158	H7	2531 E2
159	C9	2532 D2
160	G9	2534 E2
165	H8	2535 E2
166	G5	2536 E3
167	E9	2537 E2
168	E4	2538 E2
169	E4	2540 F2
170	F5	2542 G3
171	H10	2545 F2
172	C6	2546 G2
173	F4	2550 E4
174	E5	2560 G2
176	H8	2562 E2
177	H4	2563 G3
181	H7	2566 G7
182	G3	2570 G4
184	E9	2572 G6
185	E10	2574 G7
187	H9	2600 F8
188	E5	2601 E8
189	D9	2602 F8
190	G10	2604 F8
191	F3	2607 F8
192	D6	2608 F8
194	F11	2609 F8
195	D7	2610 E7
196	G9	2611 G10
197	G9	2612 G11
198	E11	2613 F11
202	F7	2614 F11
203	G3	2615 F11
204	E5	2620 G5
205	D5	2621 E7
207	D6	2622 E6
208	D6	2623 E7
209	G12	2624 E7
210	F5	2633 G11
216	D5	2638 G13
219	C9	2640 A12
220	F6	2641 F13
223	G11	2642 A9
225	F5	2645 H5
226	D3	2646 G5
228	F6	2670 F11
229	D6	2671 G11
230	F6	2690 A8
231	E5	2691 B8
232	F4	2692 B9
233	F4	2693 G8
234	F6	2695 D9
235	E5	2703 A6
236	B9	2704 A7
237	E4	2705 C6
240	G6	2706 C7
241	C7	2707 B6
242	F9	2708 B7
243	F12	2709 C6
244	B7	2710 C6
245	B10	2711 C6
246	H11	2712 B7
247	B6	2713 A6
248	F2	2714 A7
249	G3	2715 B8
250	G2	2716 C7
251	E9	3307 C10
252	F11	3308 C10
253	B2	3309 C10
254	F6	3380 C11
255	D9	3381 C11
256	B2	3382 C10
258	D2	3383 B9
259	B9	3384 B11
261	C12	3501 F2
262	C12	3502 F2
263	E12	3503 F4
265	F10	3504 D4
266	G11	3505 E4
267	G11	3506 E5
268	C11	3507 E3
269	F10	3508 E3
271	D12	3509 E4
272	E10	3510 F3
273	E10	3520 G4
274	D10	3521 G3
275	G11	3522 G3
276	G11	3523 G3
BU1	A2	3524 H3
SK1	C2	3530 D4
SK2	F7	3531 D4
1000	F13	3533 E3
1501	A3	3534 E3
1503	D7	3535 E2
2370	C10	3539 F5
2371	C11	3540 F2
2372	C11	3541 F2
2373	C10	3542 F2
2374	B9	3543 G2
2375	B11	3545 H4
2500	C1	3546 E1
2501	F2	3552 E4
2503	F2	3555 E3
2504	F3	3557 D5
2506	F3	3560 F4
2507	F4	3561 G2
2508	E3	3562 G2
2509	F2	3563 F2
2510	F3	3564 F1

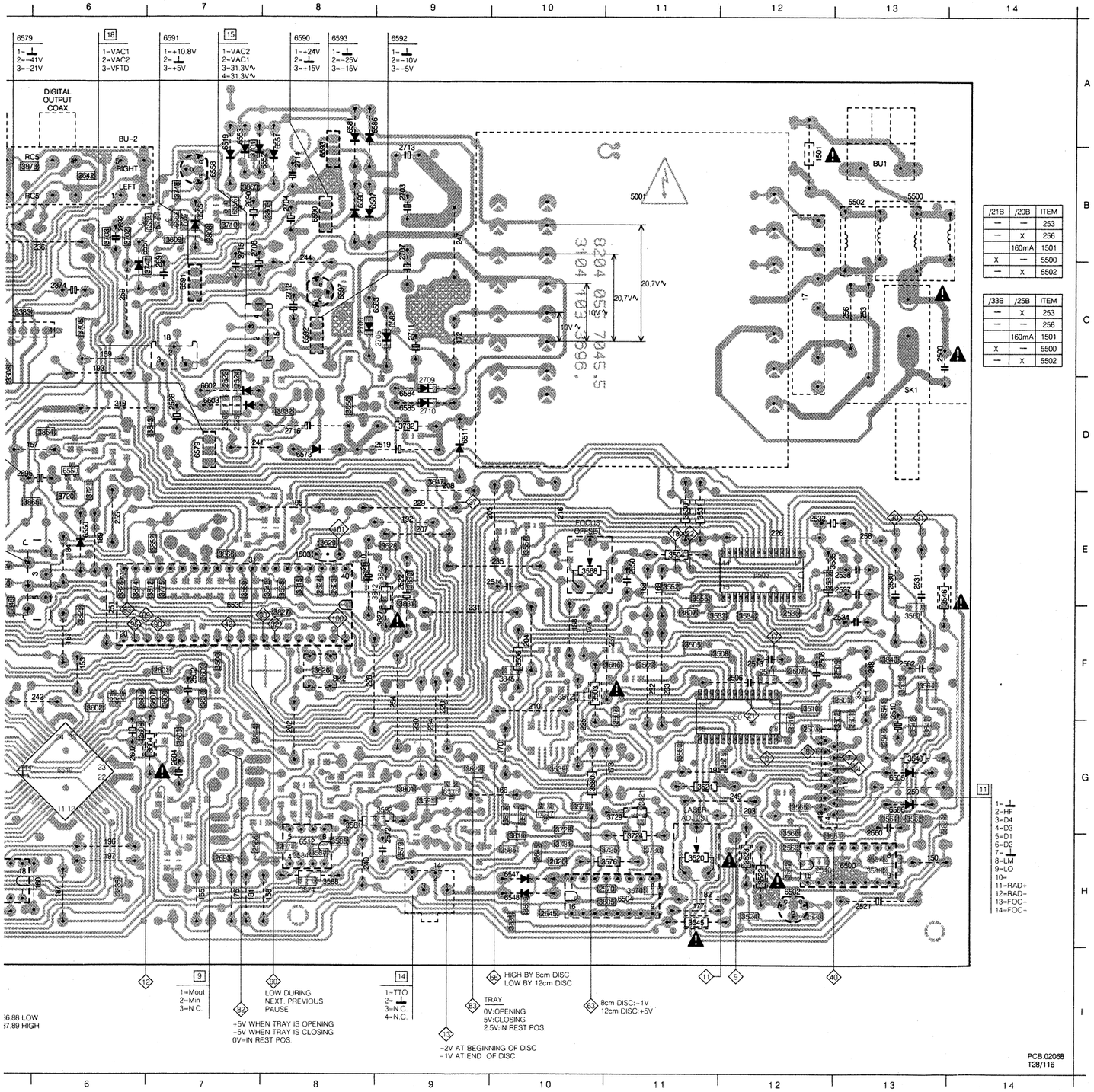


7	E9	2511	E3	3565	G3	5502	A2
11	F2	2513	E3	3566	G3	6309	B11
14	G6	2514	E5	3567	G2	6500	G2
15	C7	2515	F3	3568	E4	6501	F3
17	B3	2519	D6	3569	E2	6502	G3
18	C8	2520	H2	3574	G5	6503	E3
30	D12	2521	H2	3575	G5	6504	G4
32	B10	2522	C8	3576	G4	6505	F2
33	E11	2524	C8	3578	G4	6506	G2
150	G1	2525	C8	3579	G6	6511	C6
151	E11	2526	C8	3580	G5	6512	G7
153	F9	2528	C8	3581	G6	6516	G6
157	D9	2530	E2	3582	G6	6517	G5
158	H7	2531	E2	3584	G7	6519	A8
159	C9	2532	D2	3585	G7	6520	F9
160	G9	2534	E2	3586	G5	6523	G10
165	H8	2535	E2	3588	G7	6524	D10
166	G5	2536	E3	3589	E8	6530	E8
167	E9	2537	E2	3591	G6	6531	F12
168	E4	2538	E2	3600	E8	6541	G11
169	E4	2540	F2	3602	F9	6547	G5
170	F5	2542	G3	3603	F8	6548	G5
171	H10	2545	F2	3604	F8	6549	F9
172	C6	2546	G2	3605	F8	6550	D9
173	F4	2550	E4	3607	F8	6551	A7
174	E5	2560	G2	3609	H10	6552	A7
176	H8	2562	E2	3610	F8	6553	A8
177	H4	2563	G3	3611	G13	6554	B8
181	H7	2566	G7	3613	E10	6555	B8
182	G3	2570	G4	3627	E6	6556	A8
184	E9	2572	G6	3628	D6	6557	B8
185	E10	2574	G7	3629	D7	6558	A8
187	H9	2600	F8	3631	D10	6559	D9
188	E5	2601	E8	3638	E7	6561	G13
189	D9	2602	F8	3639	E10	6562	B8
190	G10	2604	F8	3640	E10	6568	G12
191	F3	2607	F9	3642	E7	6573	D7
192	D6	2608	F8	3645	F12	6579	D8
194	F11	2609	F8	3646	F4	6580	A7
195	D7	2610	E7	3647	D6	6581	A7
196	G9	2611	G10	3653	G13	6582	B6
197	G9	2612	G11	3654	A12	6583	B7
198	E11	2613	F11	3655	B12	6584	C6
202	F7	2614	F11	3659	G12	6585	C6
203	G3	2615	F11	3660	F11	6586	A6
204	E5	2620	G5	3661	F11	6587	A6
205	D5	2621	E7	3662	F10	6590	B7
207	D6	2622	E6	3701	A7	6591	B8
208	D6	2623	E7	3702	B9	6592	C7
209	G12	2624	E7	3703	B9	6593	A7
210	F5	2633	G11	3705	C9	6602	C8
218	D5	2638	G13	3710	B8	6603	C9
219	C9	2640	A12	3720	D9	6701	E12
220	F6	2641	F13	3721	D9	6702	D13
223	G11	2642	A9	3724	G4	6703	D13
225	F5	2645	H5	3725	G4	6704	E12
226	D3	2646	G5	3728	G5	BU-2	A8
228	F6	2670	F11	3729	G4	BU-4	A12
229	D6	2671	G11	3730	G4		
230	F6	2690	A8	3731	G5		
231	E5	2691	B8	3732	C6		
232	F4	2692	B9	3747	B8		
233	F4	2693	G8	3748	A8		
234	F6	2695	D9	3775	E8		
235	E5	2703	A6	3788	E12		
236	B9	2704	A7	3801	G6		
237	E4	2705	C6	3803	B7		
240	G6	2706	C7	3805	H4		
241	C7	2707	B6	3807	E4		
242	F9	2708	B7	3808	B8		
243	F12	2709	C6	3809	B8		
244	B7	2710	C6	3812	E8		
245	B10	2711	C6	3813	G5		
246	H11	2712	B7	3814	G5		
247	B6	2713	A6	3815	E7		
248	F2	2714	A7	3821	G4		
249	G3	2715	B8	3822	F5		
250	G2	2716	C7	3823	E9		
251	E9	3307	C10	3824	G7		
252	F11	3308	C10	3825	G13		
253	B2	3309	C10	3826	E7		
254	F6	3380	C11	3827	E7		
255	D9	3381	C11	3828	E9		
256	B2	3382	C10	3829	G1		
258	D2	3383	B9	3830	E6		
259	B9	3384	B11	3831	E6		
261	C12	3501	F2	3832	C7		
262	C12	3502	F2	3833	E10		
263	E12	3503	F4	3834	E11		
265	F10	3504	D4	3835	G9		
266	G11	3505	E4	3836	D13		
267	G11	3506	E5	3837	C6		
268	C11	3507	E3	3838	H5		
269	F10	3508	E3	3839	H5		
271	D12	3509	E4	3840	E2		
272	E10	3510	F3	3842	E6		
273	E10	3520	G4	3843	C8		
274	D10	3521	G3	3844	F7		
275	G11	3522	G3	3845	F5		
276	G11	3523	G3	3847	F2		
BU1	A2	3524	H3	3848	E10		
SK1	C2	3530	D4	3851	G2		
SK2	F7	3531	D4	3852	D8		
1000	F13	3533	E3	3856	C7		
1501	A3	3534	E3	3859	G13		
1503	D7	3535	E2	3860	A7		
2370	C10	3539	F5	3861	A10		
2371	C11	3540	F2	3864	C9		
2372	C11	3541	F2	3865	D9		
2373	C10	3542	F2	3866	D8		
2374	B9	3543	G2	3872	F5		
2375	B11	3545	H4	3873	A9		
2500	C1	3546	E1	3874	E8		
2501	F2	3552	E4	3889	G11		
2503	F2	3555	E3	3891	C12		
2504	F3	3557	D5	3892	D11		
2506	F3	3560	F4	3896	B11		
2507	F4	3561	G2	3897	E11		
2508	E3	3562	G2	5001	A4		
2509	F2	3563	F2	5500	A2		
2510	F3	3564	F1	5501	E12		

11 11

SERVO DECODER PANEL SOLDER SIDE



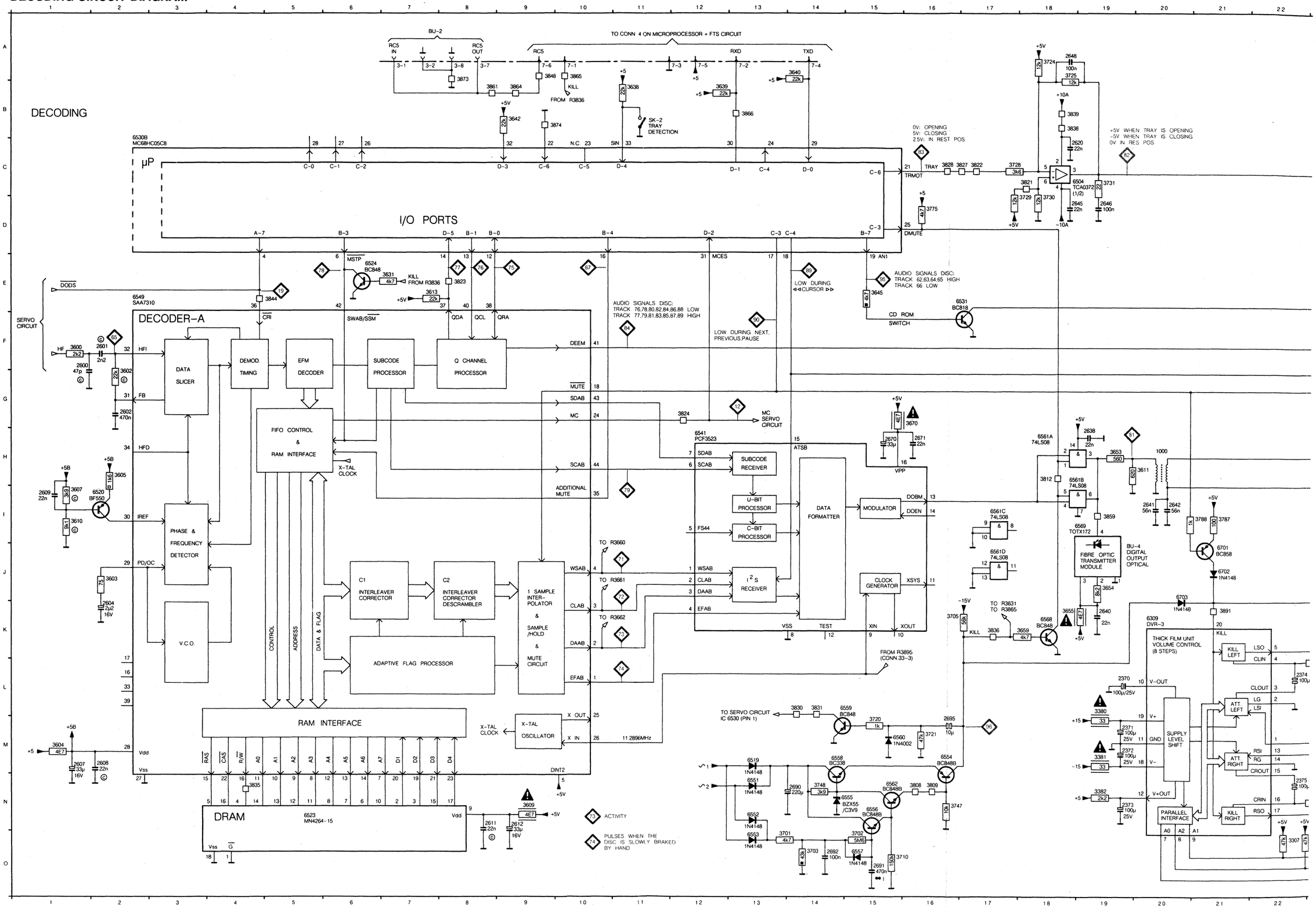


/21B	/20B	ITEM
—	—	253
—	X	256
	160mA	1501
X	—	5500
—	X	5502

/33B	/25B	ITEM
—	X	253
—	—	256
	160mA	1501
X	—	5500
—	X	5502

7	E6	2513	F12	3505	F11	3661	G4	3889	G3
11	G13	2514	E9	3505	F11	3661	G4	3891	C3
14	H9	2515	G12	3506	F10	3662	F4	3891	C3
15	C8	2515	G12	3507	F12	3701	B7	3892	E4
17	C12	2519	D8	3507	F12	3701	B7	3892	E4
18	C7	2520	H12	3508	F11	3702	B6	3896	C4
30	D3	2520	H12	3508	F11	3702	B6	3896	C4
32	C5	2521	H13	3509	F11	3703	B6	3897	F3
33	F4	2522	D7	3509	F11	3703	B6	3897	F3
150	H13	2522	D7	3510	F12	3705	C6	5001	B11
151	F4	2524	D7	3510	F12	3705	C6	5500	B13
153	F6	2524	D7	3520	H11	3710	B7	5501	F3
157	D5	2525	D7	3521	G11	3710	B7	5502	B13
158	H8	2526	D7	3522	H12	3720	E6	6309	C5
159	C6	2528	D7	3523	H12	3720	E6	6500	H13
160	H6	2530	E13	3524	H12	3721	E6	6501	G12
165	H7	2531	E13	3524	H12	3721	E6	6502	H12
166	G10	2532	E12	3530	E11	3724	H11	6503	E12
167	F6	2534	F13	3531	E11	3725	H10	6504	H11
168	E11	2535	E12	3533	F11	3725	H10	6505	G13
169	E11	2535	E12	3533	F11	3728	G10	6506	G13
170	G10	2536	F12	3534	F12	3728	G10	6511	D9
171	H5	2536	F12	3534	F12	3729	G11	6512	H8
172	C9	2537	E13	3535	E13	3730	H11	6516	G9
173	G11	2538	E13	3539	G10	3730	H11	6517	G10
174	F10	2540	F13	3539	G10	3731	H10	6519	B7
176	H7	2542	H12	3540	G13	3731	H10	6520	F6
177	H11	2542	H12	3541	F13	3732	D9	6523	H5
181	H7	2545	G13	3541	F13	3747	C7	6524	E4
182	H11	2545	G13	3542	G13	3747	C7	6530	F7
184	E6	2546	H12	3542	G13	3748	B7	6531	F2
185	F5	2546	H12	3543	H13	3748	B7	6541	H4
187	H6	2550	E11	3543	H13	3775	E7	6547	H10
188	F10	2560	H13	3545	H11	3775	E7	6548	H10
189	E6	2562	F13	3546	E13	3788	E3	6549	G6
190	H5	2563	H12	3552	E11	3788	E3	6550	E6
191	G11	2563	H12	3552	E11	3801	G9	6551	B8
192	E9	2566	H7	3555	E11	3801	G9	6552	B8
193	C6	2566	H7	3555	E11	3803	B8	6553	A7
194	G8	2570	H10	3557	E10	3803	B8	6554	B7
195	E8	2570	H10	3557	E10	3805	H10	6555	B7
196	H6	2572	H9	3560	G11	3805	H10	6556	B7
197	H6	2574	H8	3560	G11	3807	F11	6557	B7
198	F4	2574	H8	3561	G13	3807	F11	6558	B7
202	G8	2600	F7	3561	G13	3808	B7	6559	D6
203	G12	2600	F7	3562	G13	3808	B7	6561	H2
204	F10	2601	F7	3562	G13	3809	B7	6562	B7
205	E10	2601	F7	3563	F13	3809	B7	6568	G2
207	E9	2602	F7	3563	F13	3812	E7	6573	D8
208	D9	2604	G7	3564	F13	3812	E7	6579	D7
209	H3	2607	G6	3564	F13	3813	G10	6580	B8
210	F10	2608	G6	3565	G12	3813	G10	6581	A8
216	E10	2608	G6	3565	G12	3814	H10	6582	C9
219	D6	2609	F7	3566	H12	3814	H10	6583	C9
220	G9	2609	F7	3566	H12	3815	E8	6584	D9
223	H4	2610	E8	3567	H13	3815	E8	6585	D9
225	G10	2611	H4	3567	H13	3821	G11	6586	A9
226	E12	2611	H4	3568	E10	3821	G11	6587	B8
228	F8	2612	H4	3569	F13	3822	G9	6590	B8
229	E9	2613	F3	3569	F13	3822	G9	6591	C7
230	G9	2613	F3	3574	G10	3823	F6	6592	C8
231	F9	2614	G3	3574	G10	3823	F6	6593	B8
232	F11	2614	G3	3575	G10	3824	H8	6593	B8
233	F11	2615	F4	3575	G10	3824	H8	6597	C8
234	G9	2615	F4	3576	H10	3825	H2	6602	D7
235	E9	2620	H10	3578	H11	3825	H2	6603	D7
236	B5	2620	H10	3578	H11	3826	F8	6701	E3
237	F11	2621	E8	3579	H9	3826	F8	6702	E2
240	H8	2621	E8	3579	H9	3827	F8	6703	E2
241	D7	2622	E9	3580	G10	3827	F8	6704	E3
242	F5	2623	E8	3581	G8	3828	E6	BU-2	A6
243	G3	2623	E8	3582	G9	3828	E6	BU-4	B3
244	C8	2624	E8	3582	G9	3829	G13		
245	B5	2624	E8	3584	H8	3829	G13		
246	H4	2633	G4	3584	H8	3830	E9		
247	B9	2633	G4	3585	H8	3831	F9		
248	F13	2638	H2	3585	H8	3831	F9		
249	G12	2640	B3	3586	H10	3832	D8		
250	G13	2640	B3	3586	H10	3832	D8		
251	F6	2641	G2	3588	H8	3833	F4		
252	F3	2641	G2	3589	E7	3833	F4		
253	C13	2642	B6	3589	E7	3834	F4		
254	F9	2642	B6	3591	G9	3834	F4		
255	E6	2645	H10	3591	G9	3835	H6		
256	C13	2645	H10	3600	F7	3835	H6		
258	E13	2646	H10	3600	F7	3836	E2		
259	C6	2646	H10	3602	F6	3836	E2		
261	D3	2670	G4	3602	F6	3838	H10		
262	D3	2671	G4	3603	G7	3838	H10		
263	F3	2671	G4	3603	G7	3839	H10		
265	G5	2690	B7	3604	G7	3839	H10		
266	H4	2691	C7	3605	F6	3840	F13		
267	G4	2692	B6	3605	F6	3840	F13		
268	D4	2693	H7	3607	F7	3842	E9		
269	G5	2693	H7	3607	F7	3842	E9		
271	D3	2695	D5	3609	H4	3843	D7		
272	F5	2703	B9	3610	F7	3843	D7		
273	F5	2704	B8	3610	F7	3844	G7		
274	E5	2705	C9	3611	G2	3844	G7		
275	G4	2705	C9	3611	G2	3845	F10		
276	G3	2706	C8	3613	E5	3845	F10		
BU1	B13	2706	C8	3613	E5	3847	G13		
SK1	D13	2707	B9	3627	F9	3847	G13		
SK2	F8	2708	B7	3628	E9	3848	F5		
1000	G2	2709	D9	3628	E9	3848	F5		
1501	B12	2710	D9	3629	E8	3851	H12		
1503	E8	2711	C9	3629	E8	3851	H12		
2370	C5	2712	C8	3631	E5	3852	E7		
2371	C4	2713	B9	3638	E8	3852	E7		
2372	C4	2714	B8	3638	E8	3856	D8		
2373	C5	2715	B7	3639	E5	3856	D8		
2374	C6	2716	D8	3639	E5	3859	G2		
2375	C4	3307	C5	3640	E5	3859	G2		
2500	C13	3307	C5	3640	E5	3860	B7		
2501	G13	3308	D5	3642	E8	3860	B7		
2501	G13	3308	D5	3642	E8	3861	B5		
2503	F13	3309	D5	3645	F3	3861	B5		
2503	F13	3309	D5	3645	F3	3864	D6		
2504	G12	3380	D4	3646	F11	3864	D6		
2504	G12	3381	D4	3646	F11	3865	E5		
2506	F12	3382	D5	3647	D9	3865	E5		
2507	G11	3383	C5	3647	D9	3866	E7		
2507	G11	3383	C5	3653	G2	3866	E7		
2508	F12	3384	C4	3653	G2	3872	F10		
2509	F13	3384	C4	3654	B3	3872	F10		
2509	F13	3501	F13	3654	B3	3873	B5		
2510	G12	3501	F13	3655	B3	3873	B5		
2510	G12	3502	G13	3659	G3	3874	E6		
2511	F12	3503	F10	3660	G4	3874	E6		
2511	F12	3504	E11	3660	G4	3889	G3		

DECODING CIRCUIT DIAGRAM



TO CONN. 4 ON MICROPROCESSOR + FTS CIRCUIT

RXD TXD

3865 KILL

ROM R3836

SK-2 TRAY DETECTION

N.C. 23 SIN 33 30 24 29

C-5 D-4 D-1 C-4 D-0

0V: OPENING
5V: CLOSING
2.5V: IN REST POS

+5V WHEN TRAY IS OPENING
-5V WHEN TRAY IS CLOSING
0V IN RES POS

TRAY 3828 3827 3822

TRMOT

DMUTE

6504 TCA0372 (1/2)

TO TRAY MOTOR

TO CONN. 23 ON AUDIO CIRCUIT

FROM IC6549 PEN 4

FROM IC6549 PEN 3

FROM IC6549 PEN 2

WSAB 33-5

CLAB 33-6

DAAB 33-8

DEC 33-9

ATT 33-2

MUTE 33-1

XSYS 33-3

TO IC6541 PEN 9

BU-2 DIGITAL OUTPUT COAX

AUDIO SIGNALS DISC:
TRACK 76,78,80,82,84,86,88 LOW
TRACK 77,79,81,83,85,87,89 HIGH

LOW DURING NEXT, PREVIOUS,PAUSE

LOW DURING ◀◀CURSOR ▶▶

AUDIO SIGNALS DISC:
TRACK 62,63,64,65 HIGH
TRACK 66 LOW

CD ROM SWITCH

DEEM 41

MUTE 18

SDAB 43

MC 24

SCAB 44

ADDITIONAL MUTE 35

MC SERVO CIRCUIT

6541 PCF3523

ATSB 15

VPP 16

SUBCODE RECEIVER

U-BIT PROCESSOR

C-BIT PROCESSOR

DATA FORMATTER

MODULATOR

DOBM 13

DOEN 14

CLOCK GENERATOR

XSYS 11

I²S RECEIVER

WSAB 4

CLAB 3

DAAB 2

EFAB 1

TO R3660

TO R3661

TO R3662

VSS 8 TEST 12 XIN 9 XOUT 10

X OUT 25

X IN 26 11.2896MHz

INT2 5

+5V

FROM R3895 (CONN.33-3)

6561A 74LS08

6561B 74LS08

6561C 74LS08

6561D 74LS08

6569 TOTX172

FIBRE OPTIC TRANSMITTER MODULE

BU-4 DIGITAL OUTPUT OPTICAL

6568 BC848

6701 BC858

6702 1N4148

6703 1N4148

6309 DVR-3

THICK FILM UNIT VOLUME CONTROL (8 STEPS)

KILL LEFT

KILL RIGHT

ATT LEFT

ATT RIGHT

SUPPLY LEVEL SHIFT

PARALLEL INTERFACE

V-OUT V+ GND V- V+OUT

LSO CLIN CLOUT LG LSI RSI RG CROUT CRIN RSO

A0 A2 A1

TO CONN. 21 ON AUDIO CIRCUIT

BU-2 VARIABLE LINE OUT

TO CONN. 3 ON MICROPROCESSOR + FTS CIRCUIT

TO SERVO CIRCUIT IC 6530 (PIN 1)

6519 6551 6552 6553 1N4148

6555 BZX55 /C3V9

6558 BC338

6554 6556 6562 BC848B

6560 1N4002

ACTIVITY

PULSES WHEN THE DISC IS SLOWLY BRAKED BY HAND

MC SIGNAL 5µs/DIV 0V ≈ 11µs

STAND BY POSITION 0V

BEGINNING PLAY POSITION 0V

PLAY POSITION 0V

1ms/DIV NUMBER DEPENDS ON SEARCH SPEED

PLAY POSITION 5µs/DIV WSAB

CLAB 11.34µs

10ms/DIV QRA PLAY POSITION ASYNCHRONOUS µP DEPENDENT

0.2ms/DIV QCL 10x8BITS

QDA COUNTING DATA

50µs/DIV PLAY POSITION 136µs

50µs/DIV 136µs

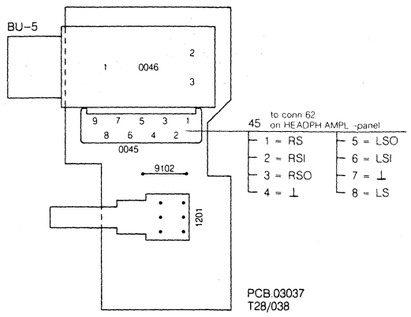
5µs/DIV 0V

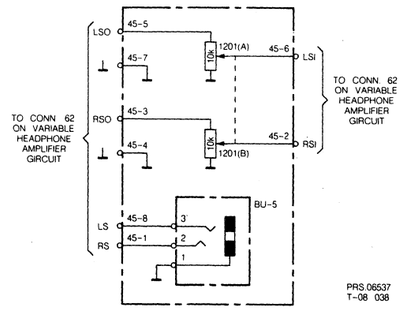
+3.5V 0V -8V POWER ON POWER OFF

PRS.06924
T10/113

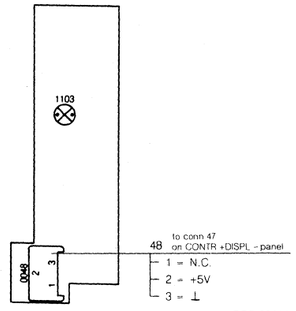
1000 H20
2370 L19
2371 M19
2372 M19
2373 N19
2374 L22
2375 N22
2600 F1
2601 F2
2602 G2
2604 K2
2607 M1
2608 M2
2609 I 1
2611 N8
2612 N9
2613 D24
2614 E24
2615 F24
2620 C18
2638 H19
2640 K19
2641 I 20
2642 I 20
2645 D18
2646 D19
2648 A18
2670 H15
2671 H16
2690 N14
2691 O15
2692 O14
2695 M16
3307 O22
3308 O23
3309 O23
3380 L19
3381 M19
3382 N19
3383 K23
3384 N23
3600 F1
3602 G2
3603 J2
3604 M1
3605 H2
3607 I 1
3609 N9
3610 I 1
3611 H20
3613 E7
3631 E7
3638 B11
3639 B12
3640 A14
3642 B9
3645 E15
3653 H19
3654 J19
3655 K18
3659 K18
3660 D24
3661 E24
3662 F24
3670 A16
3701 O13
3702 O15
3703 O14
3705 K16
3710 O15
3720 M15
3721 M16
3724 A18
3725 A18
3728 C17
3729 D18
3730 D18
3731 C19
3747 N16
3748 N14
3775 D16
3782 K23
3787 I 21
3788 I 21
3808 N16
3809 N16
3812 H18
3821 C18
3822 C17
3823 E8
3824 G12
3827 C17
3828 C16
3830 L14
3831 L14
3835 N4
3836 K17
3838 B18
3839 B18
3844 E5
3848 A9
3859 I 19
3861 B8
3864 B9
3865 A10
3866 B13
3873 B8
3873 L24
3874 B10
3891 K21
3892 O24
3895 G24
3896 N23
3897 G24
6309 K20
6519 M13
6520 I 2
6523 N5
6524 E6
6531 E17
6541 H12
6549 E2
6551 N13
6552 N13
6553 O13
6554 M16
6555 N14
6556 N15
6557 O15
6558 M14
6559 L15
6560 M15
6562 N15
6568 K18
6569 I 18
6701 J21
6702 J21
6703 J20
SK-2 B11
6530B C2
6561A H18
6561B H18
6561C I 17
6561D J17

VARIABLE HEADPHONE





LIGHTING



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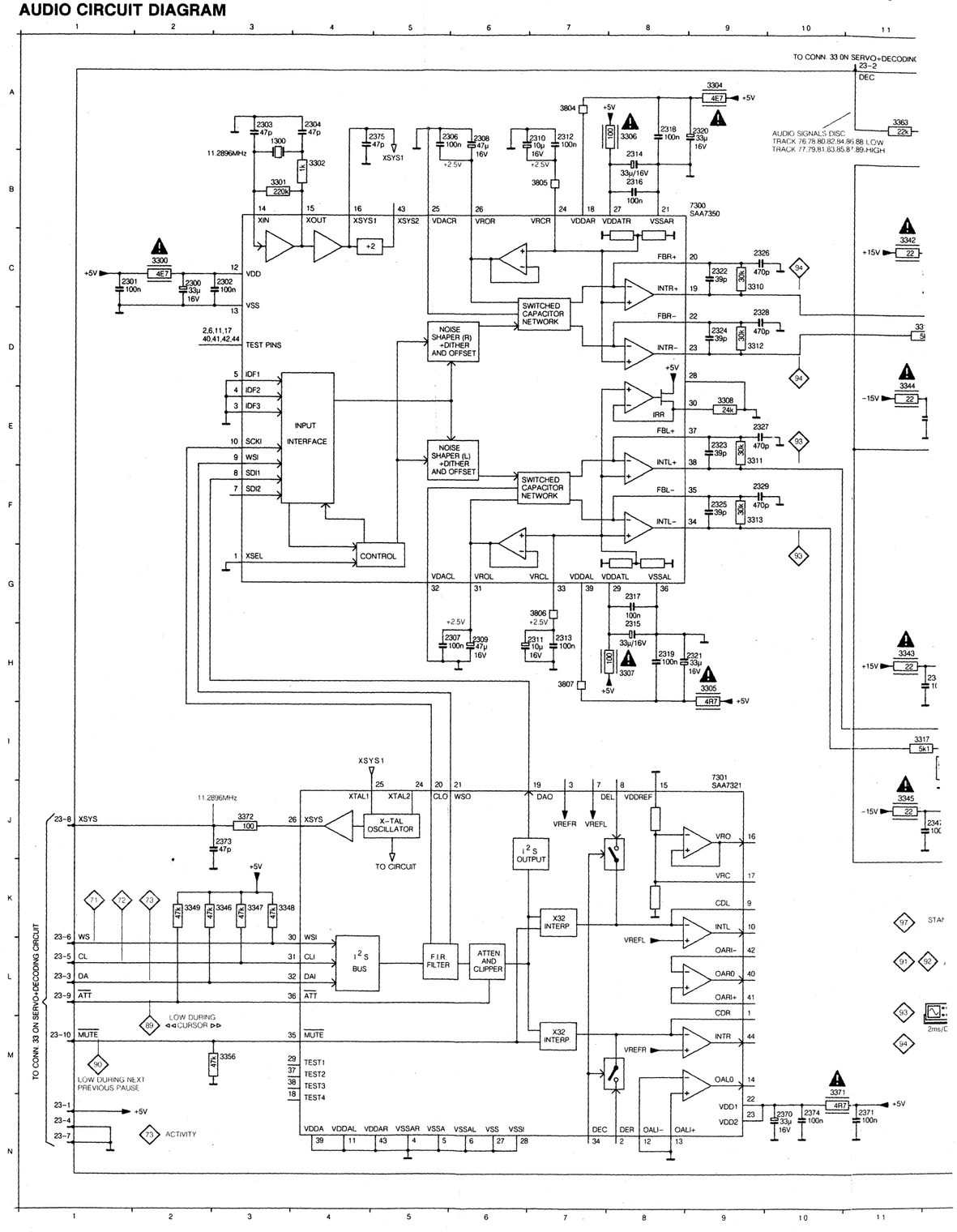
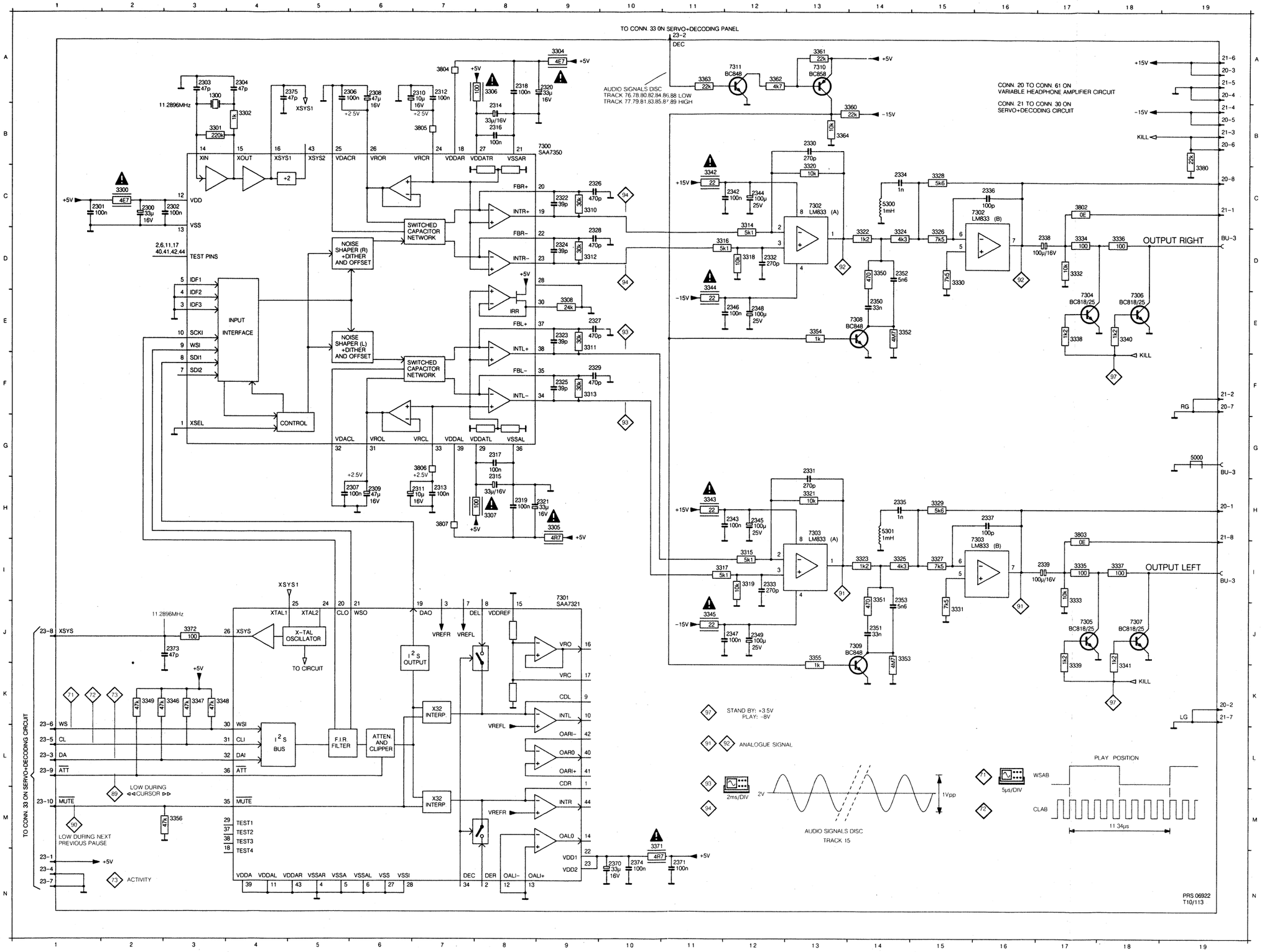
AUDIO CIRCUIT DIAGRAM



AUDIO CIRCUIT DIAGRAM



1300	A3
2300	C2
2301	C1
2302	C3
2303	A3
2304	A4
2306	A5
2307	H5
2308	A6
2309	H6
2310	A7
2311	H7
2312	A7
2313	H7
2314	B8
2315	H8
2316	B8
2317	G8
2318	A8
2319	H8
2320	A9
2321	H9
2322	C9
2323	E9
2324	D9
2325	F9
2326	C9
2327	E9
2328	D9
2329	F9
2330	B13
2331	G13
2332	D12
2333	I 12
2334	C14
2335	H14
2336	C16
2337	H16
2338	D17
2339	I 17
2342	C12
2343	H12
2344	C12
2345	H12
2346	E12
2347	J12
2348	E12
2349	J12
2350	E14
2351	J14
2352	D14
2353	I 14
2370	N10
2371	N. 1
2373	J3
2374	N10
2375	A4
3300	C2
3301	B3
3302	B4
3304	A9
3305	H9
3306	A8
3307	H8
3308	E9
3311	E9
3312	D9
3313	F9
3314	C12
3315	I 12
3316	D11
3317	I 11
3318	D12
3319	I 12
3320	C13
3321	H13
3322	D14
3323	I 14
3324	D14
3325	I 14
3326	D15
3327	I 15
3328	C15
3329	H15
3330	D15
3331	J15
3332	D17
3333	J17
3334	D17
3335	I 17
3336	D18
3337	I 18
3338	E17
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3341	K18
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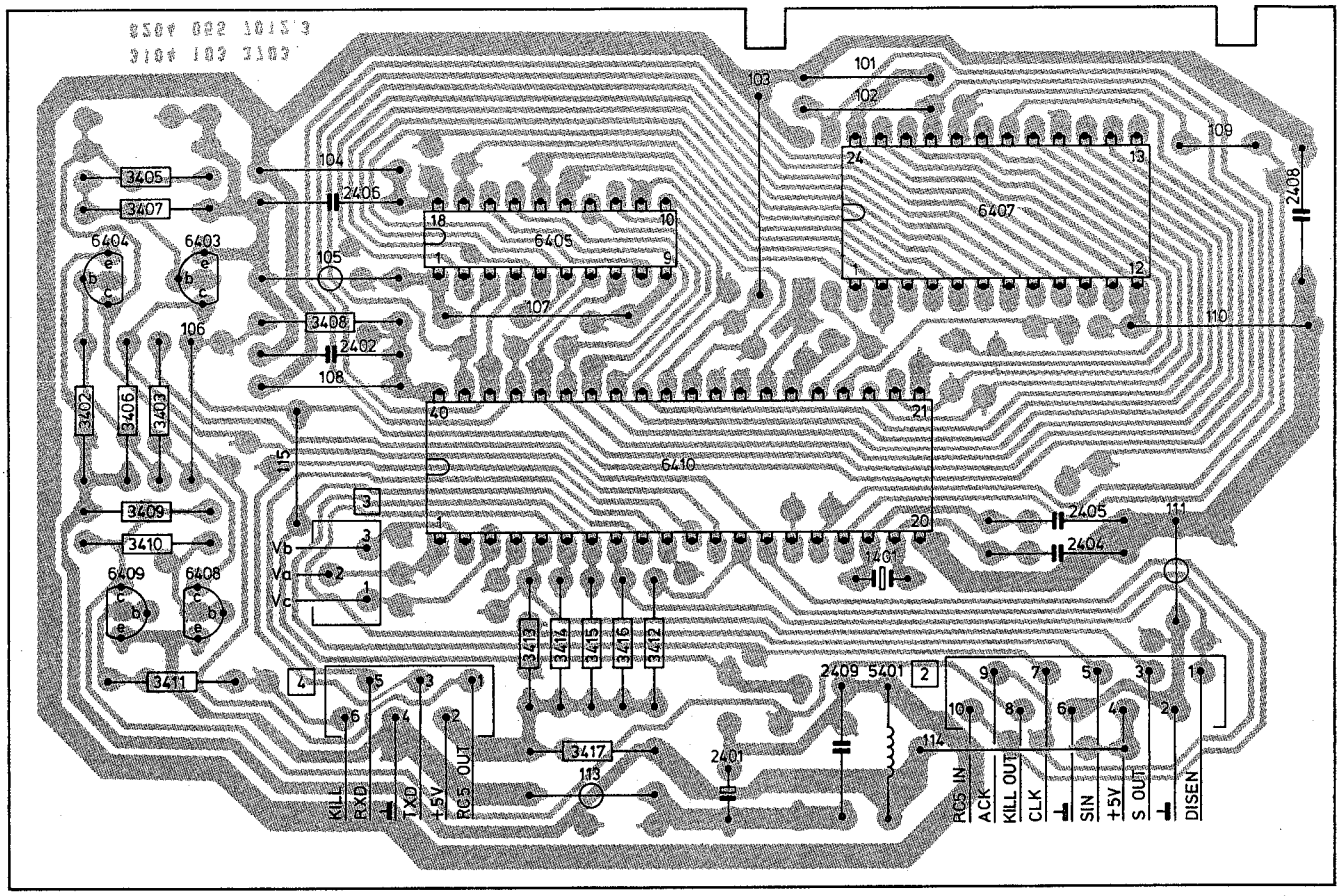
3347	K3
3348	K3
3349	K2
3350	D14
3351	J14
3352	E14
3353	J14
3354	E13
3355	J13
3356	M3
3360	B14
3361	A13
3362	A12
3363	A11
3364	B13
3371	M10
3372	J3
3380	C19
3802	C17
3803	H17
3804	A7
3805	B7
3806	G7
3807	H7
5000	G19
5300	C14
5301	H14
7300	B9
7301	I 9
7302	C13
7302	C15
7303	H13
7303	I 15
7304	E17
7305	J17
7306	E18
7307	J18
7308	E14
7309	J14
7310	A13
7311	A12

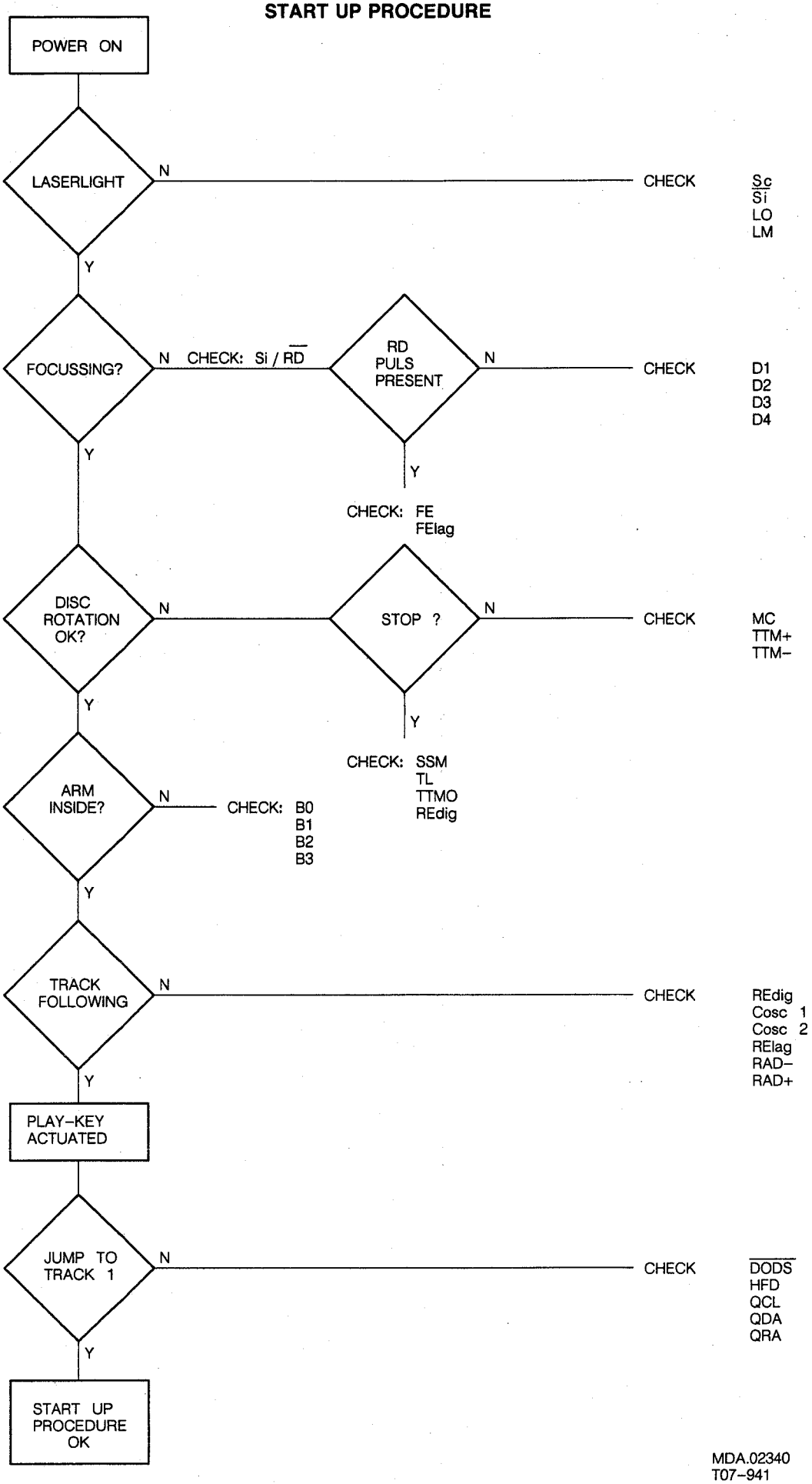
MICROPROCESSOR AND FTS PANEL



45 720 C14

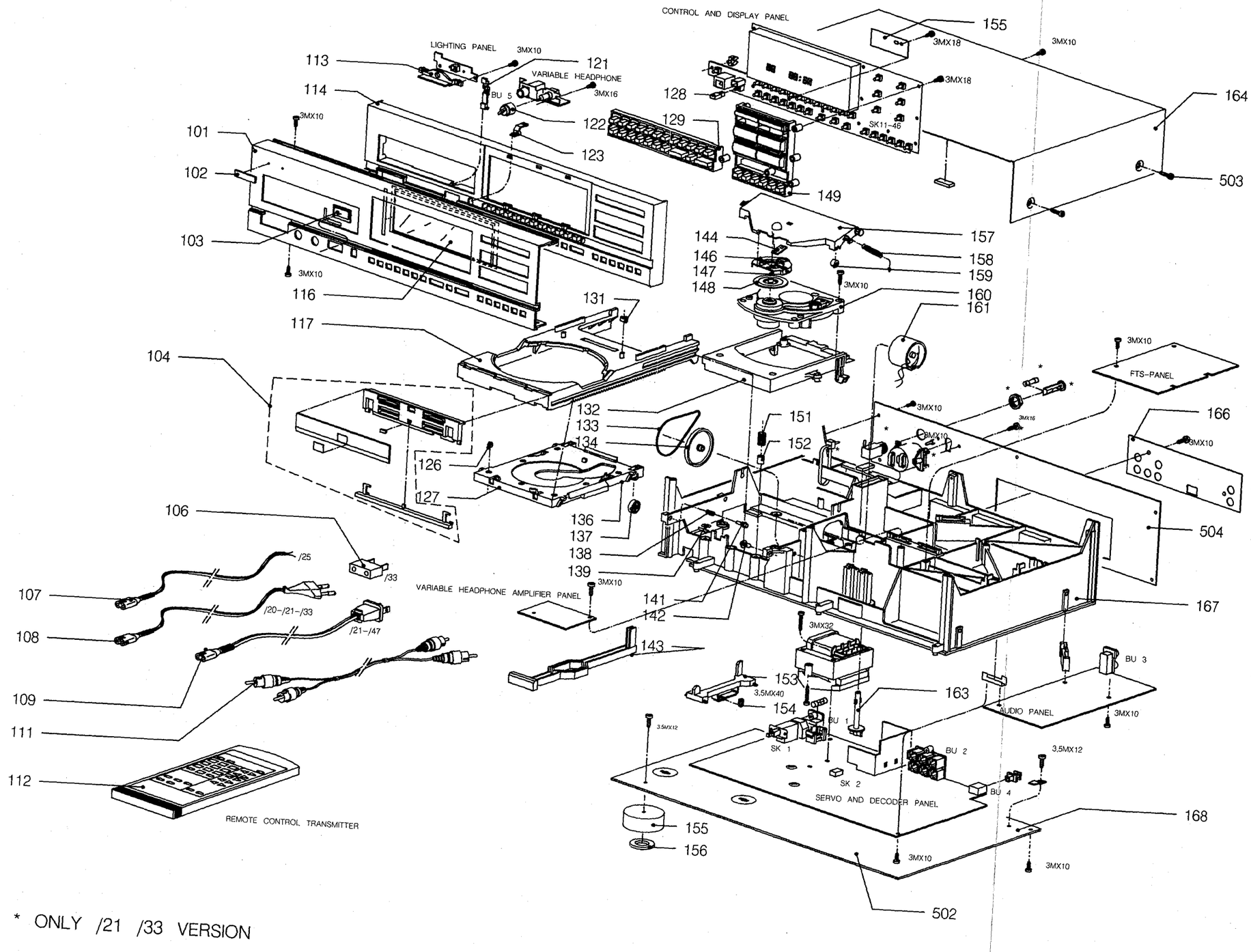
Conn. 2 to conn. 44 on Control and Display panel
Conn. 3 to conn. 32 on Servo and Decoding panel
Conn. 4 to conn. 7 on Servo and Decoding panel

START UP PROCEDURE



MDA.02340
T07–941

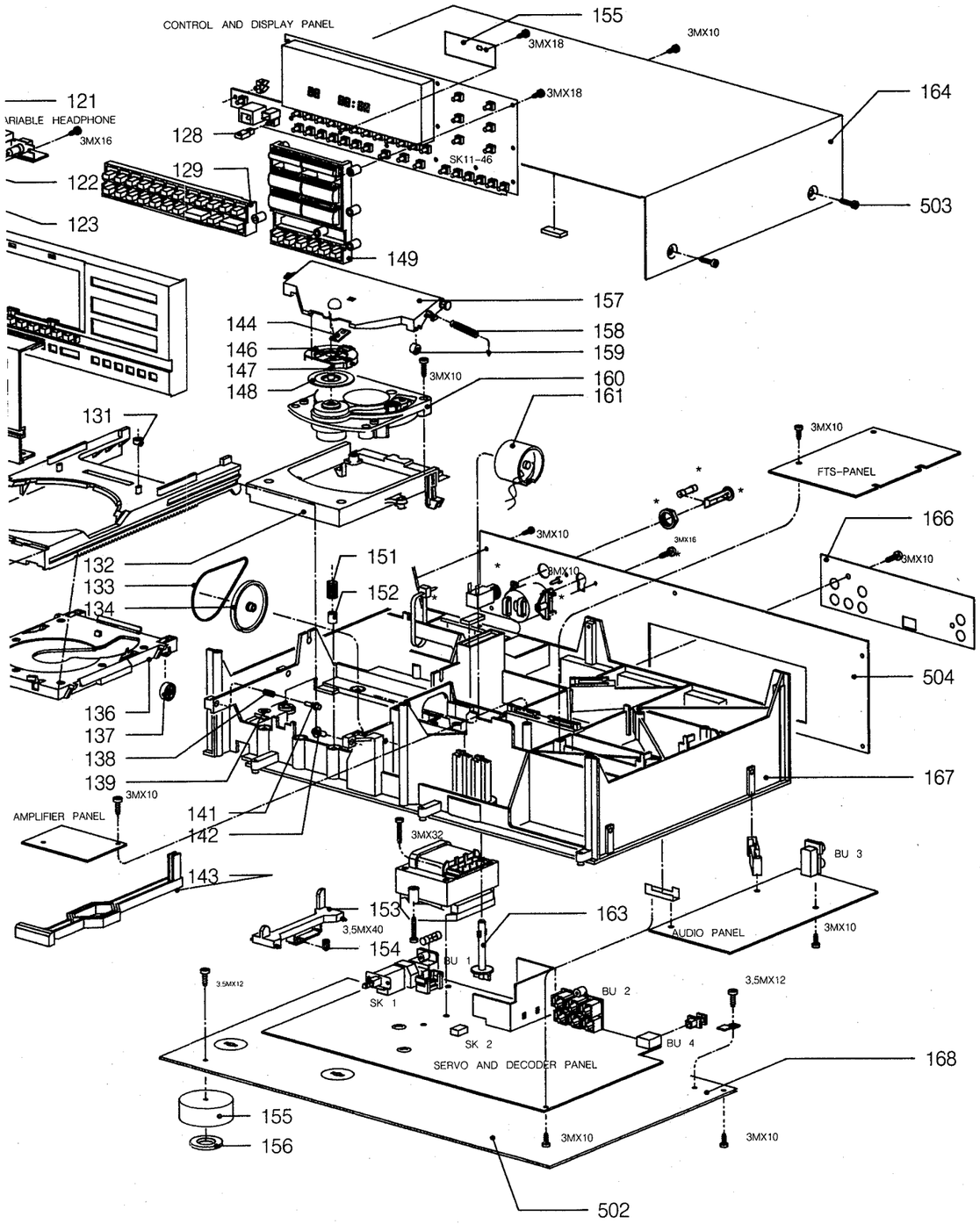
EXPLODED VIEW



* ONLY /21 /33 VERSION

EVA.01260
T28/113

HAS.CD850.20B



EVA.01260
T28/113

HAS.CD850.20B

MECHANICAL PARTSLIST

101	4822 444 40458
102	4822 459 10887
103	4822 450 61311
104	4822 444 40459
106	4822 263 50179
107	4822 321 10719
108	4822 321 10249
109	4822 321 10677
111	4822 321 23116
112	4822 218 10404 RD5886/00
114	4822 444 40379
113	4822 466 61922
116	4822 450 61728
117	4822 444 50603
121	4822 402 61332
122	4822 411 61674
123	4822 381 11126
126	4822 325 60317
127	4822 466 92888
128	4822 410 60714
129	4822 410 60712
131	4822 532 51756
132	4822 402 61196
133	4822 358 10115
134	4822 528 81329
136	4822 466 92888
137	4822 528 90638
138	4822 492 52094
139	4822 466 92903
141	4822 402 61252
142	4822 402 61132
143	4822 535 93107
144	4822 466 92257
146	4822 402 61207
147	4822 520 40177
148	4822 532 52234
149	4822 410 60713
151	4822 492 51902
152	4822 466 61587
153	4822 402 50276
154	4822 492 52123
155	4822 462 41397
157	4822 444 60568
158	4822 492 32883
159	4822 528 90639
160	4822 691 30209
161	4822 361 21258
163	4822 535 92907
164	4822 444 60706
166	4822 444 60752
167	4822 444 50632
168	4822 444 50634

HF-Transformer

1000	4822 148 80281	

Crystal

1503	4822 242 72579	4,00 MHz

2370	4822 124 41525	100µF 20% 25V
2371	4822 124 41525	100µF 20% 25V
2372	4822 124 41525	100µF 20% 25V
2373	4822 124 41525	100µF 20% 25V
2374	4822 124 22339	100µF 20% 16V
2375	4822 124 22339	100µF 20% 16V
2500	4822 126 10454	3,3nF 20% 400V
2501	4822 122 32863	22nF 80% 50V
2503	4822 122 32863	22nF 80% 50V
2504	4822 122 31727	470pF 5% 63V
2506	4822 122 10166	22nF 30% 16V
2507	4822 122 31644	2,2nF 10% 63V
2508	4822 121 43526	47nF 5% 100V
2509	4822 122 31765	100pF 5% 50V
2510	4822 122 32442	10nF 10% 50V
2511	4822 122 31746	1000pF 5% 50V
2513	4822 121 42408	220nF 5% 63V
2514	4822 121 51252	470nF 5% 63V
2515	4822 122 31746	1000pF 5% 50V
2519	4822 124 22027	47µF 20% 25V
2520	4822 122 31965	220pF 5% 63V
2521	4822 124 22027	47µF 20% 25V
2522	4822 122 32863	22nF 80% 50V
2524	4822 122 32863	22nF 80% 50V
2525	4822 122 32863	22nF 80% 50V
2526	4822 122 32863	22nF 80% 50V
2528	5322 124 22094	220µF 20% 50V
2530	4822 121 51321	8,2µF 1% 63V
2531	4822 121 51321	8,2µF 1% 63V
2532	4822 124 40272	33µF 20% 16V
2534	5322 121 42661	330nF 5% 63V
2535	4822 122 31981	33nF 10% 50V
2536	4822 122 31981	33nF 10% 50V
2537	4822 121 42408	220nF 5% 63V
2538	4822 121 42408	220nF 5% 63V
2540	4822 124 41583	0,68µF 2% 50V Bipolar
2542	4822 122 32863	22nF 80% 50V
2545	4822 122 33496	100nF 10% 63V
2546	4822 122 32863	22nF 80% 50V
2550	4822 121 43526	47nF 5% 100V
2560	4822 121 43901	4,7nF 5% 50V
2561	4822 121 51252	470nF 5% 63V
2562	5322 121 42661	330nF 5% 63V
2563	4822 122 33496	100nF 10% 63V
2566	4822 122 32863	22nF 80% 50V
2570	4822 122 31644	2,2nF 10% 63V
2572	5322 121 42661	330nF 5% 63V
2574	4822 122 31759	18nF 10% 63V
2600	4822 122 31772	47pF 5% 50V
2601	4822 122 31644	2,2nF 10% 63V
2602	4822 121 51252	470nF 5% 63V
2604	4822 124 41576	2,2µF 20% 50V
2607	4822 124 40272	33µF 20% 16V
2608	4822 122 32863	22nF 80% 50V
2609	4822 122 32863	22nF 80% 50V
2610	4822 124 20688	33µF 50% 16V
2611	4822 122 32863	22nF 80% 50V
2612	4822 124 40272	33µF 20% 16V
2613	4822 122 31772	47pF 5% 50V

2614	4822 122 31772	47pF 5% 50V
2615	4822 122 31772	47pF 5% 50V
2620	4822 122 32863	22nF 80% 50V
2621	4822 122 32863	22nF 80% 50V
2622	4822 124 22031	4,7µF 20% 63V
2623	4822 122 31772	47pF 5% 50V
2624	4822 122 31772	47pF 5% 50V
2638	4822 122 10166	22nF 30% 16V
2640	4822 122 32863	22nF 80% 50V
2641	4822 122 33105	56nF 10% 63V
2642	4822 122 33105	56nF 10% 63V
2645	4822 122 32863	22nF 80% 50V
2646	4822 122 33496	100nF 10% 63V
2648	4822 122 33496	100nF 10% 63V
2670	4822 124 40272	33µF 20% 16V
2671	4822 122 32863	22nF 80% 50V
2690	4822 124 41334	470µF 20% 35V
2691	4822 121 51252	470nF 5% 63V
2692	5322 121 42386	100nF 5% 63V
2693	4822 122 32863	22nF 80% 50V
2695	4822 124 41558	10µF 20% 25V Bipolar
2703	4822 124 41859	330µF 20% 35V
2704	4822 124 40433	47µF 20% 25V
2705	4822 122 32863	22nF 80% 50V
2706	4822 122 32863	22nF 80% 50V
2707	4822 124 41591	6800µF 20% 16V
2708	4822 124 40272	33µF 20% 16V
2709	4822 122 32863	22nF 80% 50V
2710	4822 122 32863	22nF 80% 50V
2711	4822 124 41853	1000µF 20% 16V
2712	4822 124 40272	33µF 20% 16V
2713	4822 124 41334	470µF 20% 35V
2714	4822 124 40433	47µF 20% 25V
2715	5322 121 42386	100nF 5% 63V
2716	5322 124 21643	22µF 20% 40V

3307	4822 051 10473	47k 2% 0,25W
3308	4822 051 10473	47k 2% 0,25W
3309	4822 051 10473	47k 2% 0,25W
3380	4822 052 10339	33Ω 5% 0,33W
3381	4822 052 10339	33Ω 5% 0,33W
3382	4822 050 22202	2k2 1% 0,6W
3383	4822 051 10103	10k 2% 0,25W
3384	4822 051 10103	10k 2% 0,25W
3501	4822 051 10472	4k7 2% 0,25W
3502	4822 051 10104	100k 2% 0,25W
3503	4822 052 10478	4Ω7 5% 0,33W
3504	4822 052 10478	4Ω7 5% 0,33W
3505	4822 051 10123	12k 2% 0,25W
3506	4822 051 10101	100Ω 2% 0,25W
3507	4822 051 10102	1k 2% 0,25W
3508	4822 051 10243	24k 2% 0,25W
3509	4822 051 10562	5k6 2% 0,25W
3510	4822 051 10103	10k 2% 0,25W
3520	4822 101 10685	4k7 20%LIN 0.05W
3521	4822 050 22201	220Ω 1% 0,6W
3530	4822 050 24703	47k 1% 0,6W
3531	4822 050 21503	15k 1% 0,6W
3533	4822 051 10512	5k1 2% 0,25W
3534	4822 051 10224	220k 2% 0,25W
3522	4822 052 10189	18Ω 5% 0,33W
3523	4822 052 10129	12Ω 5% 0,33W
3524	4822 051 10101	100Ω 2% 0,25W
3535	4822 050 21203	12k 1% 0,6W
3539	4822 051 10223	22k 2% 0,25W

3540	4822 052 10478	4Ω7 5% 0,33W
3541	4822 051 10682	6k8 2% 0,25W
3542	4822 051 10339	33Ω 2% 0,25W
3543	4822 051 10682	6k8 2% 0,25W
3545	4822 052 10108	1Ω 5% 0,33W
3546	4822 052 10108	1Ω 5% 0,33W
3552	4822 051 10182	1k8 2% 0,25W
3555	4822 051 20183	18k 5% 0,1W
3557	4822 051 10224	220k 2% 0,25W
3560	4822 111 91494	11k 2% 0,25W
3561	4822 051 10154	150k 2% 0,25W
3562	4822 051 10124	120k 2% 0,25W
3563	4822 051 10563	56k 2% 0,25W
3564	4822 111 91495	160k 2% 0,25W
3565	4822 051 10279	27Ω 2% 0,25W
3566	4822 051 10229	22Ω 2% 0,25W
3567	4822 051 10823	82k 2% 0,25W
3568	4822 100 11193	22k 20%LIN 0.05W
3569	4822 111 90368	680k 2% 0,125W
3574	4822 051 10333	33k 2% 0,25W
3575	4822 051 10472	4k7 2% 0,25W
3576	4822 050 22004	200k 1% 0,6W
3578	4822 051 10823	82k 2% 0,25W
3579	4822 051 10154	150k 2% 0,25W
3580	4822 050 24702	4k7 1% 0,6W
3581	4822 050 23302	3k3 1% 0,6W
3582	4822 051 10562	5k6 2% 0,25W
3584	4822 051 10913	91k 2% 0,25W
3585	4822 051 10104	100k 2% 0,25W
3586	4822 111 90368	680k 2% 0,125W
3588	4822 050 24703	47k 1% 0,6W
3589	4822 051 10472	4k7 2% 0,25W
3591	4822 051 10122	1k2 2% 0,25W
3600	4822 051 20222	2k2 5% 0,1W
3602	4822 051 10223	22k 2% 0,25W
3603	4822 051 10759	75Ω 2% 0,25W
3604	4822 052 10478	4Ω7 5% 0,33W
3605	4822 051 10162	1k6 2% 0,25W
3607	4822 051 10392	3k9 2% 0,25W
3609	4822 052 10478	4Ω7 5% 0,33W
3610	4822 051 10912	9k1 2% 0,25W
3611	4822 051 10621	620Ω 2% 0,25W
3613	4822 051 10223	22k 2% 0,25W
3627	4822 052 10478	4Ω7 5% 0,33W
3628	4822 051 10223	22k 2% 0,25W
3629	4822 051 10224	220k 2% 0,25W
3631	4822 050 24702	4k7 1% 0,6W
3638	4822 051 10223	22k 2% 0,25W
3639	4822 051 10223	22k 2% 0,25W
3640	4822 051 10223	22k 2% 0,25W
3642	4822 051 10223	22k 2% 0,25W
3645	4822 051 10472	4k7 2% 0,25W
3646	4822 051 10223	22k 2% 0,25W
3647	4822 051 10223	22k 2% 0,25W
3653	4822 051 10561	560Ω 2% 0,25W
3654	4822 051 10822	8k2 2% 0,25W
3655	4822 052 10478	4Ω7 5% 0,33W
3659	4822 050 24702	4k7 1% 0,6W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 051 10101	100Ω 2% 0,25W
3662	4822 051 10101	100Ω 2% 0,25W
3670	4822 052 10478	4Ω7 5% 0,33W
3701	4822 051 10472	4k7 2% 0,25W
3702	4822 051 10565	5M6 5% 0,25W
3703	4822 051 10433	43k 2% 0,25W
3705	4822 051 10563	56k 2% 0,25W

3710	4822 051 10154	150k 2% 0,25W
3720	4822 051 10102	1k 2% 0,25W
3721	4822 051 10473	47k 2% 0,25W
3724	4822 050 21203	12k 1% 0,6W
3725	4822 051 10123	12k 2% 0,25W
3728	4822 051 10362	3k6 2% 0,25W
3729	4822 050 21203	12k 1% 0,6W
3730	4822 051 10123	12k 2% 0,25W
3731	4822 051 10229	22Ω 2% 0,25W
3732	4822 050 23902	3k9 1% 0,6W
3747	4822 051 10103	10k 2% 0,25W
3748	4822 051 10392	3k9 2% 0,25W
3775	4822 051 10472	4k7 2% 0,25W
3782	4822 051 10563	56k 2% 0,25W
3787	4822 051 10101	100Ω 2% 0,25W
3788	4822 051 10102	1k 2% 0,25W
3801	4822 051 10008	jumper
3803	4822 051 10008	jumper
3805	4822 051 10008	jumper
3807	4822 051 10008	jumper
3808	4822 051 10008	jumper
3809	4822 051 10008	jumper
3812	4822 051 10008	jumper
3813	4822 051 10008	jumper
3814	4822 051 10008	jumper
3815	4822 051 10008	jumper
3821	4822 051 10008	jumper
3822	4822 051 10008	jumper
3823	4822 051 10008	jumper
3824	4822 051 10008	jumper
3826	4822 051 10008	jumper
3827	4822 051 10008	jumper
3828	4822 051 10008	jumper
3829	4822 051 10008	jumper
3830	4822 051 10008	jumper
3831	4822 051 10008	jumper
3832	4822 051 10008	jumper
3833	4822 051 10008	jumper
3834	4822 051 10008	jumper
3835	4822 051 10008	jumper
3836	4822 051 10008	jumper
3837	4822 051 10008	jumper
3838	4822 051 10008	jumper
3839	4822 051 10008	jumper
3840	4822 051 10008	jumper
3842	4822 051 10008	jumper
3843	4822 051 10008	jumper
3844	4822 051 10008	jumper
3845	4822 051 10008	jumper
3847	4822 051 10008	jumper
3848	4822 051 10008	jumper
3851	4822 051 10008	jumper
3852	4822 051 10008	jumper
3856	4822 051 10008	jumper
3859	4822 051 10008	jumper
3860	4822 051 10008	jumper
3861	4822 051 10008	jumper
3864	4822 051 10008	jumper
3865	4822 051 10008	jumper
3866	4822 051 10008	jumper
3872	4822 051 10008	jumper
3873	4822 051 10008	jumper
3874	4822 051 10008	jumper
3891	4822 051 10008	jumper
3892	4822 051 10008	jumper
3896	4822 051 10008	jumper
3897	4822 051 10008	jumper

5500
5502

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6587
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6591
6592
6593
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6701
6702
6703

23

3540	4822 052 10478	4Ω7 5% 0,33W
3541	4822 051 10682	6k8 2% 0,25W
3542	4822 051 10339	33Ω 2% 0,25W
3543	4822 051 10682	6k8 2% 0,25W
3545	4822 052 10108	1Ω 5% 0,33W
3546	4822 052 10108	1Ω 5% 0,33W
3552	4822 051 10182	1k8 2% 0,25W
3555	4822 051 20183	18k 5% 0,1W
3557	4822 051 10224	220k 2% 0,25W
3560	4822 111 91494	11k 2% 0,25W
3561	4822 051 10154	150k 2% 0,25W
3562	4822 051 10124	120k 2% 0,25W
3563	4822 051 10563	56k 2% 0,25W
3564	4822 111 91495	160k 2% 0,25W
3565	4822 051 10279	27Ω 2% 0,25W
3566	4822 051 10229	22Ω 2% 0,25W
3567	4822 051 10823	82k 2% 0,25W
3568	4822 100 11193	22k 20%LIN 0.05W
3569	4822 111 90368	680k 2% 0,125W
3574	4822 051 10333	33k 2% 0,25W
3575	4822 051 10472	4k7 2% 0,25W
3576	4822 050 22004	200k 1% 0,6W
3578	4822 051 10823	82k 2% 0,25W
3579	4822 051 10154	150k 2% 0,25W
3580	4822 050 24702	4k7 1% 0,6W
3581	4822 050 23302	3k3 1% 0,6W
3582	4822 051 10562	5k6 2% 0,25W
3584	4822 051 10913	91k 2% 0,25W
3585	4822 051 10104	100k 2% 0,25W
3586	4822 111 90368	680k 2% 0,125W
3588	4822 050 24703	47k 1% 0,6W
3589	4822 051 10472	4k7 2% 0,25W
3591	4822 051 10122	1k2 2% 0,25W
3600	4822 051 20222	2k2 5% 0,1W
3602	4822 051 10223	22k 2% 0,25W
3603	4822 051 10759	75Ω 2% 0,25W
3604	4822 052 10478	4Ω7 5% 0,33W
3605	4822 051 10162	1k6 2% 0,25W
3607	4822 051 10392	3k9 2% 0,25W
3609	4822 052 10478	4Ω7 5% 0,33W
3610	4822 051 10912	9k1 2% 0,25W
3611	4822 051 10621	620Ω 2% 0,25W
3613	4822 051 10223	22k 2% 0,25W
3627	4822 052 10478	4Ω7 5% 0,33W
3628	4822 051 10223	22k 2% 0,25W
3629	4822 051 10224	220k 2% 0,25W
3631	4822 050 24702	4k7 1% 0,6W
3638	4822 051 10223	22k 2% 0,25W
3639	4822 051 10223	22k 2% 0,25W
3640	4822 051 10223	22k 2% 0,25W
3642	4822 051 10223	22k 2% 0,25W
3645	4822 051 10472	4k7 2% 0,25W
3646	4822 051 10223	22k 2% 0,25W
3647	4822 051 10223	22k 2% 0,25W
3653	4822 051 10561	560Ω 2% 0,25W
3654	4822 051 10822	8k2 2% 0,25W
3655	4822 052 10478	4Ω7 5% 0,33W
3659	4822 050 24702	4k7 1% 0,6W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 051 10101	100Ω 2% 0,25W
3662	4822 051 10101	100Ω 2% 0,25W
3670	4822 052 10478	4Ω7 5% 0,33W
3701	4822 051 10472	4k7 2% 0,25W
3702	4822 051 10565	5M6 5% 0,25W
3703	4822 051 10433	43k 2% 0,25W
3705	4822 051 10563	56k 2% 0,25W

3710	4822 051 10154	150k 2% 0,25W
3720	4822 051 10102	1k 2% 0,25W
3721	4822 051 10473	47k 2% 0,25W
3724	4822 050 21203	12k 1% 0,6W
3725	4822 051 10123	12k 2% 0,25W
3728	4822 051 10362	3k6 2% 0,25W
3729	4822 050 21203	12k 1% 0,6W
3730	4822 051 10123	12k 2% 0,25W
3731	4822 051 10229	22Ω 2% 0,25W
3732	4822 050 23902	3k9 1% 0,6W
3747	4822 051 10103	10k 2% 0,25W
3748	4822 051 10392	3k9 2% 0,25W
3775	4822 051 10472	4k7 2% 0,25W
3782	4822 051 10563	56k 2% 0,25W
3787	4822 051 10101	100Ω 2% 0,25W
3788	4822 051 10102	1k 2% 0,25W
3801	4822 051 10008	jumper
3803	4822 051 10008	jumper
3805	4822 051 10008	jumper
3807	4822 051 10008	jumper
3808	4822 051 10008	jumper
3809	4822 051 10008	jumper
3812	4822 051 10008	jumper
3813	4822 051 10008	jumper
3814	4822 051 10008	jumper
3815	4822 051 10008	jumper
3821	4822 051 10008	jumper
3822	4822 051 10008	jumper
3823	4822 051 10008	jumper
3824	4822 051 10008	jumper
3826	4822 051 10008	jumper
3827	4822 051 10008	jumper
3828	4822 051 10008	jumper
3829	4822 051 10008	jumper
3830	4822 051 10008	jumper
3831	4822 051 10008	jumper
3832	4822 051 10008	jumper
3833	4822 051 10008	jumper
3834	4822 051 10008	jumper
3835	4822 051 10008	jumper
3836	4822 051 10008	jumper
3837	4822 051 10008	jumper
3838	4822 051 10008	jumper
3839	4822 051 10008	jumper
3840	4822 051 10008	jumper
3842	4822 051 10008	jumper
3843	4822 051 10008	jumper
3844	4822 051 10008	jumper
3845	4822 051 10008	jumper
3847	4822 051 10008	jumper
3848	4822 051 10008	jumper
3851	4822 051 10008	jumper
3852	4822 051 10008	jumper
3856	4822 051 10008	jumper
3859	4822 051 10008	jumper
3860	4822 051 10008	jumper
3861	4822 051 10008	jumper
3864	4822 051 10008	jumper
3865	4822 051 10008	jumper
3866	4822 051 10008	jumper
3872	4822 051 10008	jumper
3873	4822 051 10008	jumper
3874	4822 051 10008	jumper
3891	4822 051 10008	jumper
3892	4822 051 10008	jumper
3896	4822 051 10008	jumper
3897	4822 051 10008	jumper

5500	4822 157 60309	ANTI INTERFERENCE COIL /21B /33B
5502	4822 214 51841	MAINSFILTER /20B /25B

6309	4822 214 51724	DVR-3
6500	4822 209 72587	TCA0372DP2
6501	4822 209 73234	TDA8808T/C3
6502	4822 130 44121	BC338
6503	4822 209 73235	TDA8809T/C2
6504	4822 209 72587	TCA0372DP2
6505	4822 130 30861	BZX79-C7V5
6506	4822 130 30861	BZX79-C7V5
6511	4822 130 34173	BZX79-C5V6
6512	4822 209 83274	NJM4560D
6516	5322 130 42012	BC858A
6517	5322 130 42012	BC858A
6519	5322 130 30684	1N4002
6520	4822 130 42131	BF550
6523	4822 209 70422	MN4264-15
6524	4822 130 61207	BC848
6530	4822 209 63362	MC68HC05C8P/ZC99827
6531	4822 130 42675	BC818
6541	4822 209 62588	PCF3523P
6547	5322 130 30684	1N4002
6548	5322 130 30684	1N4002
6549	4822 209 61759	SAA7310GP/H5
6550	5322 130 30684	1N4002
6551	5322 130 30684	1N4002
6552	4822 130 30621	1N4148
6553	4822 130 30621	1N4148
6554	4822 130 42513	BC858C
6555	4822 130 31981	BZX79-C3V9
6556	4822 130 61207	BC848
6557	4822 130 30621	1N4148
6558	4822 130 44121	BC338
6559	4822 130 61207	BC848
6561	4822 209 60803	SN74LS08D
6562	4822 130 61207	BC848
6568	4822 130 61207	BC848
6573	4822 130 34195	BZX79-C13
6577	5322 130 41899	MC7915CT
6580	5322 130 30684	1N4002
6581	5322 130 30684	1N4002
6582	5322 130 30684	1N4002
6583	5322 130 30684	1N4002
6584	5322 130 30684	1N4002
6585	5322 130 30684	1N4002
6586	5322 130 30684	1N4002
6587	5322 130 30684	1N4002
6590	4822 209 80808	MC78M15CT
6591	4822 209 71579	TY40408
6592	5322 209 11222	MC7905CT
6593	5322 130 41899	MC7915CT
6602	5322 130 30684	1N4002
6603	5322 130 30684	1N4002
6701	5322 130 42012	BC858A
6702	4822 130 30621	1N4148
6703	4822 130 30621	1N4148

Miscellaneous

BU-1	4822 265 20291	MAINS INLET
BU-2	4822 267 20368	CINCH 5P
BU-4	4822 218 20752	TOTX172
SK-1	4822 276 11309	MAINS SWITCH
SK-2	4822 276 12523	
	4822 492 63076	CLAMPING SPRING

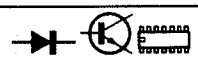
CONTROL AND DISPLAY PANEL

Switch

SK11	4822 276 20463	DIGITAL OUT ON/OFF
SK..	4822 276 12276	CONTROL SWITCHES

2100	4822 122 10166	22nF 30% 16V
2104	4822 122 10166	22nF 30% 16V
2105	4822 124 22027	47µF 20% 25V
2106	4822 122 10166	22nF 30% 16V
2201	5322 124 21711	100µF 20% 25V
2202	5322 124 21711	100µF 20% 25V
2203	5322 124 21711	100µF 20% 25V
2204	5322 124 21711	100µF 20% 25V

3100	5322 111 90473	8x10k 2% NETWORK
3101	5322 111 90473	8x10k 2% NETWORK
3135	4822 050 21003	10k 1% 0,6W
3151	4822 052 10478	4Ω7 5% 0,33W
3160	4822 050 28209	82Ω 1% 0,6W
3161	4822 050 21002	1k 1% 0,6W
3162	4822 050 26201	620Ω 1% 0,6W
3201	4822 051 10101	100Ω 2% 0,25W
3202	4822 051 10101	100Ω 2% 0,25W
3203	4822 050 21003	10k 1% 0,6W
3204	4822 050 21003	10k 1% 0,6W
3205	4822 052 10109	10Ω 5% 0,33W
3206	4822 052 10109	10Ω 5% 0,33W
3207	4822 116 52264	27k 5% 0,5W
3208	4822 116 52264	27k 5% 0,5W
3209	4822 051 10122	1k2 2% 0,25W
3210	4822 051 10122	1k2 2% 0,25W
3211	4822 050 21501	150Ω 1% 0,6W
3212	4822 050 21501	150Ω 1% 0,6W



6201	4822 209 82362	NJM4556D
6203	4822 130 44121	BC338
6204	4822 130 44121	BC338
6501	4822 209 61191	TMP47C670N-1364
6502	4822 209 60886	UDN-2580A
6503	4822 209 60886	UDN-2580A
6518	4822 130 30613	BAW62
6519	4822 130 30613	BAW62
6520	4822 130 30613	BAW62
6521	4822 130 30613	BAW62
6522	4822 130 30613	BAW62
6523	4822 130 30613	BAW62
6524	4822 130 30613	BAW62
6525	4822 130 30613	BAW62
6526	4822 130 30613	BAW62
6529	4822 130 80849	TLHR4499
6531	4822 130 40938	BC548

Miscellaneous

	4822 255 30203	LAMP HOLDER
	4822 256 91644	LED HOLDER
	4822 256 91643	FTD HOLDER
BU-5	4822 267 31065	
1100	4822 214 51772	IR RECEIVER GP1U521X
1101	4822 242 73654	CST6.00MGW
1102	4822 130 90858	DISPLAY 9-MT-83GK
1103	4822 134 40909	LAMP 5V 60mA
1201	4822 102 10398	10K LOG POTMETER

AUDIO PANEL

Crystal

1300	4822 242 71349	11,2896 MHz

2300	4822 124 40272	33µF 20% 16V
2301	4822 122 33496	100nF 10% 63V
2302	4822 122 33496	100nF 10% 63V
2303	5322 122 32452	47pF 5% 50V
2304	5322 122 32452	47pF 5% 50V
2306	4822 122 33496	100nF 10% 63V
2307	4822 122 33496	100nF 10% 63V
2308	4822 124 40433	47µF 20% 25V
2309	4822 124 40433	47µF 20% 25V
2310	4822 124 40435	10µF 20% 50V
2311	4822 124 40435	10µF 20% 50V
2312	4822 122 33496	100nF 10% 63V
2313	4822 122 33496	100nF 10% 63V
2314	4822 124 40272	33µF 20% 16V
2315	4822 124 40272	33µF 20% 16V
2316	4822 122 33496	100nF 10% 63V
2317	4822 122 33496	100nF 10% 63V
2318	4822 122 33496	100nF 10% 63V
2319	4822 122 33496	100nF 10% 63V
2320	4822 124 40272	33µF 20% 16V
2321	4822 124 40272	33µF 20% 16V
2322	5322 122 32966	39pF 5% 50V
2323	5322 122 32966	39pF 5% 50V
2324	5322 122 32966	39pF 5% 50V
2325	5322 122 32966	39pF 5% 50V
2326	5322 122 32268	470pF 10% 50V
2327	5322 122 32268	470pF 10% 50V
2328	5322 122 32268	470pF 10% 50V
2329	5322 122 32268	470pF 10% 50V
2330	4822 121 51569	270pF 1% 400V
2331	4822 121 51569	270pF 1% 400V
2332	4822 121 51569	270pF 1% 400V
2333	4822 121 51569	270pF 1% 400V
2334	4822 121 50591	1nF 1% 630V
2335	4822 121 50591	1nF 1% 630V
2336	4822 121 51288	100pF 1% 630V
2337	4822 121 51288	100pF 1% 630V
2338	4822 124 22339	100µF 20% 16V
2339	4822 124 22339	100µF 20% 16V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 124 41525	100µF 20% 25V
2345	4822 124 41525	100µF 20% 25V
2346	4822 122 33496	100nF 10% 63V
2347	4822 122 33496	100nF 10% 63V
2348	4822 124 41525	100µF 20% 25V
2349	4822 124 41525	100µF 20% 25V
2350	4822 121 51147	33nF 2% 63V
2351	4822 121 51147	33nF 2% 63V
2352	4822 121 51079	5600pF 1% 160V
2353	4822 121 51079	5600pF 1% 160V
2370	4822 124 40272	33µF 20% 16V
2371	4822 122 33496	100nF 10% 63V
2373	5322 122 32452	47pF 5% 50V
2374	4822 122 33496	100nF 10% 63V
2375	5322 122 32452	47pF 5% 50V

3300	4822 052 10478	4Ω7 5% 0,33W
3301	4822 051 20224	220k 5% 0,1W
3302	4822 051 10102	1k 2% 0,25W
3304	4822 052 10478	4Ω7 5% 0,33W
3305	4822 052 10478	4Ω7 5% 0,33W
3306	4822 052 10101	100Ω 5% 0,33W
3307	4822 052 10101	100Ω 5% 0,33W
3308	4822 050 22403	24k 1% 0,6W
3310	4822 050 23003	30k 1% 0,6W
3311	4822 050 23003	30k 1% 0,6W
3312	4822 050 23003	30k 1% 0,6W
3313	4822 050 23003	30k 1% 0,6W
3314	4822 050 25102	5k1 1% 0,6W
3315	4822 050 25102	5k1 1% 0,6W
3316	4822 050 25102	5k1 1% 0,6W
3317	4822 050 25102	5k1 1% 0,6W
3318	4822 050 21003	10k 1% 0,6W
3319	4822 050 21003	10k 1% 0,6W
3320	4822 050 21003	10k 1% 0,6W
3321	4822 050 21003	10k 1% 0,6W
3322	4822 050 21202	1k2 1% 0,6W
3323	4822 050 21202	1k2 1% 0,6W
3324	4822 050 24302	4k3 1% 0,6W
3325	4822 050 24302	4k3 1% 0,6W
3326	4822 050 27502	7k5 1% 0,6W
3327	4822 050 27502	7k5 1% 0,6W
3328	4822 050 25602	5k6 1% 0,6W
3329	4822 050 25602	5k6 1% 0,6W
3330	4822 050 27502	7k5 1% 0,6W
3331	4822 050 27502	7k5 1% 0,6W
3332	4822 050 21003	10k 1% 0,6W
3333	4822 050 21003	10k 1% 0,6W
3334	4822 051 10101	100Ω 2% 0,25W
3335	4822 051 10101	100Ω 2% 0,25W
3336	4822 051 10101	100Ω 2% 0,25W
3337	4822 051 10101	100Ω 2% 0,25W
3338	4822 051 20122	1k2 5% 0,1W
3339	4822 051 20122	1k2 5% 0,1W
3340	4822 051 10122	1k2 2% 0,25W
3341	4822 051 10122	1k2 2% 0,25W
3342	4822 052 10229	22Ω 5% 0,33W
3343	4822 052 10229	22Ω 5% 0,33W
3344	4822 052 10229	22Ω 5% 0,33W
3345	4822 052 10229	22Ω 5% 0,33W
3346	4822 050 24703	47k 1% 0,6W
3347	4822 050 24703	47k 1% 0,6W
3348	4822 050 24703	47k 1% 0,6W
3349	4822 050 24703	47k 1% 0,6W
3350	4822 116 52224	470Ω 5% 0,5W
3351	4822 116 52224	470Ω 5% 0,5W
3352	4822 051 20135	1M 5% 0,1W
3353	4822 051 20135	1M 5% 0,1W
3354	4822 050 21002	1k 1% 0,6W
3355	4822 050 21002	1k 1% 0,6W
3356	4822 050 24703	47k 1% 0,6W
3360	4822 050 22203	22k 1% 0,6W
3361	4822 051 20223	22k 5% 0,1W
3362	4822 050 24702	4k7 1% 0,6W
3363	4822 051 20223	22k 5% 0,1W
3364	4822 051 20103	10k 5% 0,1W
3371	4822 052 10478	4Ω7 5% 0,33W
3372	4822 051 20101	100Ω 5% 0,1W
3380	4822 051 20223	22k 5% 0,1W
3802	4822 051 10008	jumper
3803	4822 051 10008	jumper
3804	4822 051 10008	jumper
3805	4822 051 10008	jumper
3806	4822 051 10008	jumper
3807	4822 051 10008	jumper

5000	4822 157 60363	Anti interference coil
5300	4822 157 50975	1 mH 10%
5301	4822 157 50975	1 mH 10%
7300	4822 701 11933	SAA7350
7301	4822 209 30008	SAA7322GP
7302	4822 209 83163	LM833N
7303	4822 209 83163	LM833N
7304	4822 130 42696	BC818-25
7305	4822 130 42696	BC818-25
7306	4822 130 42696	BC818-25
7307	4822 130 42696	BC818-25
7308	4822 130 61207	BC848
7309	4822 130 61207	BC848
7310	5322 130 42012	BC858
7311	4822 130 61207	BC848

Miscellaneous

BU-3	4822 267 30878	

MICROPROCESSOR AND FTS PANEL

Crystal

1401	4822 242 73759	12 MHZ
2401	4822 124 40272	33µF 20% 16V
2402	4822 122 10166	22nF 30% 16V
2404	4822 122 10179	33pF 5% 50V
2405	4822 122 10179	33pF 5% 50V
2406	4822 122 10166	22nF 30% 16V
2408	4822 122 10166	22nF 30% 16V
2409	4822 122 10166	22nF 30% 16V
3402	4822 050 21003	10k 1% 0,6W
3403	4822 050 21003	10k 1% 0,6W
3405	4822 050 24703	47k 1% 0,6W
3406	4822 050 21803	18k 1% 0,6W
3407	4822 050 21803	18k 1% 0,6W
3408	4822 050 22203	22k 1% 0,6W
3409	4822 050 22203	22k 1% 0,6W
3410	4822 050 24704	470k 1% 0,6W
3411	4822 050 24704	470k 1% 0,6W
3412	4822 050 22203	22k 1% 0,6W
3413	4822 050 22203	22k 1% 0,6W
3414	4822 050 22203	22k 1% 0,6W
3415	4822 050 22203	22k 1% 0,6W
3416	4822 050 22203	22k 1% 0,6W
3417	4822 052 10108	1Ω 5% 0,33W
5401	4822 157 51235	4,7µH 10%
6403	4822 130 40938	BC548
6404	4822 130 40941	BC558
6405	5322 209 11118	PC74HCT373P
6407	4822 209 72102	X2816BP
6408	4822 130 40938	BC548
6409	4822 130 40938	BC548
6410	4822 209 30004	PCB83C654P/AC026

MISCELLANEOUS

	4822 256 30274	FUSE HOLDER
1010	4822 263 40054	VOLTAGE SELECTOR
1501	4822 070 31601	FUSE 160mA
5001	4822 146 30988	MAINSTRANSFORMER /20B /25B
5001	4822 146 30948	MAINSTRANSFORMER /21B /33B